# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 478.—Vol. XIV.] LONDON: SATURDAY, OCTOBER 19, 1844. [Price 6d.


**STEAM-ENGINE AND SPARE MINING MATERIALS** FOR SALE.—TO BE SOLD, BY AUCTION, at TREWAVAS MINE, in the parish of Breage, on Friday, the 25th instant, a 40-inch cylinder STEAM-ENGINE, CAPSTAN, and SHEARS; quantity of PUMPS, from 4 to 12-inch; crooked and other steam pipes, fixed plugs, manhole plates, and nozzles; clack-seat plates and doors; H-pieces and windbores; plunger poles and cases; stuffing boxes and glands, from 4 to 16 inch; gudgeons, staples and glands; a large lot of wrought and cast iron; old boiler plates and whim kibbins; bucket rods, capstan rope, and timber, and various other mining materials.

*The Sale to commence at Eleven o'clock in the Forenoon.*

For particulars apply to the agents on the mine; or to the *purser*, Mr. Pinson, Helstone.—Dated October 8. 1

**MINING MATERIALS FOR SALE.—TO BE SOLD, BY** PUBLIC AUCTION, at BENAL-BRIDGE, in the parish of Kea, on Wednesday, the 30th of October inst., the following MINE MATERIALS:—

| | | | |
|---|---|---|---|
| 1 | 30-inch cylinder ENGINE and 1 boiler—complete | 1 | 10-inch doorpiece |
| 2 | Capstan and shears | 1 | 12-inch do. |
| 1 | Balance-bob | 1 | 8-inch do. |
| 6 | Plunger connection-rod | 1 | 10-feet 9-inch plunger pole |
| 4 | Whims | 1 | 10-feet 9-inch do. |
| 7 | 9-feet 9-inch pumps | 1 | 4-feet 9-inch windbore |
| 1 | 12-feet do. | 1 | 10-feet 14-inch do. |
| 2 | 6-feet do. | 1 | 10-feet 12-inch do. |
| 1 | 5-feet do. | 1 | 10-feet 12-inch working barrel |
| 20 | 9-feet 12-inch do. | 1 | 10-feet 14-inch do. |
| 4 | 9-feet 14-inch do. | 2 | Capstan ropes |
| 1 | 7-feet 10-inch do. | 1 | 30-feet wheel—17-inch |
| 1 | 14-inch H-piece | 1 | 30-feet do. 9-feet |
| 1 | 9-inch do. | 240 | fathoms tramroad iron; lot of rod plates; bellows and anvil; tram-waggons, fan rods, and a great variety of other useful articles. |
| 1 | 14-inch doorpiece | | |
| 2 | 12-inch do. | | |

There will be a person on the mine to show the materials, and further information may be obtained on application to Messrs. W. and E. C. Carne, St. Agnes, or Mr. John Tippett, auctioneer, Truro. 2

**IMPERIAL IRON-WORKS, WEDNESBURY, Staffordshire.** TO BE SOLD, BY AUCTION, by J. W. PUCKLE, on Thursday, the 31st of October inst., at Dee's Royal Hotel, Temple-row, Birmingham, at Four o'clock in the afternoon (unless previously disposed of by private contract, of which due notice will be given), subject to conditions to be then and there produced, all those newly erected, extensive, complete, and substantial WORKS, called the IMPERIAL IRON-WORKS, situated in the parish of Wednesbury, in the county of Stafford, upon the lower level of the Birmingham Canal, being of FREEHOLD TENURE; together with several lots of FREEHOLD AND COPYHOLD LAND near adjoining, and lately held therewith, for the deposit of spoil, containing, with the site of the works, about THREE AND A QUARTER ACRES, or thereabouts

Lot I.—The IMPERIAL IRON-WORKS, which consist of a SPACIOUS FORGE and FOUR LOFTY MILLS, with engine-power, furnaces, and machinery, for the manufacture of every description of bar, hoop, strip, sheet, and boiler-plate iron, to the extent of upwards of TWO HUNDRED TONS WEEKLY—and by recent advancement cover an area of 8436 square yards, or thereabouts.

The various shops, yards, houses, and offices, together with gas apparatus, are in every respect complete and commodious; and the entire property is, as to arrangement and all its features, of a most superior character.

There are duplicates of the most essential portions of the machinery, which, together with the tools, implements, counting-house fixtures, &c., are to be taken by at a valuation.

Lot II.—All that piece or parcel of FREEHOLD LAND, situated in Moxley Field, in the parish of Wednesbury aforesaid, containing by recent admeasurement 3210 square yards, or thereabouts

And also a piece or parcel of COPYHOLD LAND, held of the lords of the manor of Wednesbury, called THE BISCHILLS, situated in Moxley Field aforesaid, late the property of Miss Sarah Percival, containing by recent admeasurement &c. 30p., or thereabouts.

N.B. The above two pieces of land were purchased by the proprietors for the deposit of spoil, and are conveniently situated on the opposite side of the canal, and close to the above works, whereby very little expense in hauling is incurred. The amount of spoil to be removed is trifling, on account of the ready sale obtained by the neighbourhood for the fine cinder, tap, and refuse from the furnaces. 3

Lot III.—All that FREEHOLD PIECE OF LAND OR GROUND, containing by admeasurement 640 square yards, or thereabouts, fronting Portway road, Wednesbury, which was intended by the present proprietors for the site of a manager's dwelling house.

For other information, to inspect a plan, and for cards to view the works, apply to Mr. Woodward, solicitor, Wednesbury; or to the auctioneer, 3, Waterloo-street, Birmingham.—A portion of the purchase money, if required, may remain on mortgage of the works.

**MINE MATERIALS—FOR SALE, BY AUCTION,** at the Haddendale Mine, near Bakewell and Monyash, Derbyshire, on Wednesday, the 13th of November next, at Ten o'clock, the following MINE MATERIALS—viz.: An excellent nearly new 40-inch cylinder PUMPING-ENGINE, upon the Cornish principle, and made from drawings of Mr. Darlington's. The engine has a 10-feet stroke in the cylinder and 9-feet in the shaft; it is complete, with a Cornish tubular boiler, of nine tons weight, wheels, main rods, and first plans of rod, and will be sold with, or without, the wood work of the engine house; BALANCE BEAM, with box, &c., complete; engineer and sheers, all iron work complete with 8, 30 fathoms of 12 inch single laid capstan rope; a lift of pumps, consisting of a 12-inch working barrel, 12-feet long; clack draw piece, wheelbarrow, 9 10 inch pumps, each 9 feet long, and two shorter ones, with clacks and buckets complete; a lift of plungers, consisting of a 10-inch plunger case, 11-feet long, with stuffing box and gland; a 9-inch plunger pole, 10 feet long; H piece, windbore, and 21 9 inch spears, each 9-feet long, with clacks to fit; one 6-feet 14 inch mortising piece; one 10-inch door piece and door, and a 6-feet 10-inch windbore; 20 fathoms of 11 inch and 10 fathoms of 9 inch iron bucket rods and joints; 1 pair of hammered iron rings; 11 pairs of hammered iron rod plates; 40 fathoms of white manilla rope; a quantity of bolts and nuts, wedges, and glands; two pair of trucks; a pair of 40-inch sheave's bellows, anchor fluke, two large chalrons, and various other articles suitable for mining purposes.

For particulars apply to Mr. Samuel Bemroise, Alport Mines, Bakewell.

Dated October 14, 1844. 4

**TO ENGINEERS, FOUNDERS, MACHINE MAKERS,** STEAM-SHIP BUILDERS, AND OTHERS.—There will be OFFERED for SALE, by PUBLIC ROUP, within the Society of Advocates' Buildings, in Aberdeen, upon Friday, the 8th of November next, at Two o'clock Afternoon, at the upset price of £6500 sterling, the extensive and valuable MANUFACTORY for the construction of STEAM ENGINES, BOILERS, GENERAL MACHINERY, CHAIN CABLES, ANCHORS, FOUNDRY GOODS, FORGED GOODS, AND GENERAL BLACKSMITH WORK, well known as the "FOUNDRY (BOONDRAS) OF ABERDEEN," in the occupation of Messrs. John Duffus and Company.

These works occupy nearly four acres of ground, at a very moderate fee duty of ground rent, and are situated at Footdee, in the populous city of Aberdeen, within 15 yards of the harbour.

The engines, boilers, and machinery of several of the large class of steam ships have been wholly constructed and fitted up at these works, which afford ample facilities to the trade of Aberdeen, and such as exist in few other establishments in the United Kingdom. The foreign and coasting trade of the Port of Aberdeen is very extensive, and it is highly advantageously for the best general ports, whilst the steam trade to London, Hull, Leith, Inverness, Orkney, Shetland, &c., is carried on to a very considerable extent.

To a party desirous of engaging in the building and equipping of steam or sailing vessels, the construction and fitting of steam engines, angle irons, rails and railway furnishings, and general machinery, these works, from their local advantages, and facilities within themselves, will be found to be particularly eligible.

The whole of the buildings are substantial, commodious, and suitable for the respective trades carried on within them. The machinery is of the best class, and in excellent order—the whole having been erected at considerable expense.

In the same line, the works are in full and active operation, with a long established and valuable connection; and, from the establishment of a new gas work, a good outlook to the neighbourhood, and other favourable circumstances, will afford, to every prospect of a likely demand for this description of business for a long time to come.

The whole fixed and moveable MACHINERY and TOOLS will be SOLD along with the premises, by valuation.

A plan and specification of the premises have been printed, and copy thereof, with particulars and further information on the subject, to be had upon application to Messrs. Jamieson, Procurators, Leith; Hamilton, London; Mundie, Dyce and Johnston, W.S., Edinburgh; Messrs. Duff and Grant, accountants, Aberdeen; or others inside the side duties of the aforesaid date. 5

**IMPORTANT TO PROPRIETORS AND SHAREHOLDERS** IN MINES, DIRECTORS, &c.

ASSAYS OF LEAD ORE, COPPER, IRON, GOLD, SILVER, MERCURY, ZINC, MANGANESE, AND ALL OTHER ORES.

The Assays of GOLD, SILVER, &c., as to minutest trustful powers, are CONDUCTED by Messrs. MITCHELL and FIELD (late Mr. MITCHELL), ASSAYERS and ANALYTICAL CHEMISTS, &c., HATTLEY-ROAD, EXETER-TOWN. 6

**COMMERCIAL GAS LIGHT AND COKE COMPANY.**—TO IRONMASTERS AND OTHERS.—The directors of the Commercial Gas Light and Coke Company will meet at their offices at Stepney, on Wednesday, the 30th of October inst., to RECEIVE TENDERS for the SUPPLY of from THREE TO FIVE HUNDRED TONS of CAST-IRON SOCKET PIPES, from 3-inch diameter upwards. A specification may be seen, and further particulars had, on application to Mr. Isaac Mercer, the engineer on the works. By order of the board,

Offices, Stepney, Oct. 1844. JAMES G. CARALY, Secretary. 7

**A STEAM BLAST-ENGINE AND TWO STEAM BOILERS** FOR SALE.—TO BE SOLD, BY PRIVATE CONTRACT, A BLAST-ENGINE, with or without TWO BOILERS, nearly new, having been at work only two months, made by Messrs. Sandys, Carne, and Vivian, of Hayle, capable of blowing four furnaces; diameter of the steam cylinder 33 inches, and of the blowing cylinder 60 inches; length of stroke 9-feet, and length of beam 29 ft. 6 in.; a globular steel regulator 22-feet in diameter; two cylindrical boilers, with a tube through the centre, 30 ft. 6 in. long each—outside diameter 7-feet, diameter of tube 4-feet. The engine can be adapted to pumping. The whole TO BE SOLD, with fifty to sixty yards of blast-pipe, 9-feet in diameter, and other piping, at a moderate rate.

For further particulars, and to treat for the same, apply to Mr. W. Price Hopkins, civil engineer, Swansea. 8

**STEAM-ENGINE.**—TO BE SOLD (A BARGAIN), A HIGH-PRESSURE STEAM-ENGINE; cylinder about 7-inches diameter, 20-inch stroke, complete, with boiler, force pump, &c.—For particulars apply by letter paid, 547, *Midland Counties Herald* Office, Birmingham. 9

**FOR SALE, A 70-INCH CYLINDER ENGINE.**—TO BE SOLD, BY PRIVATE CONTRACT, a 70-inch CYLINDER ENGINE, with coal boilers; length of stroke in the cylinder 10 feet, and in the shaft 7 ft. 6 in. The same will be sold at a very low price.—For particulars, and to treat for the same, apply to Messrs. Hocking and Lean, engineers, Redruth.—July 29. 10

**WANTED IMMEDIATELY,** a steady respectable YOUTH, as an APPRENTICE to the LAND and MINE SURVEYING, in the centre of the South Staffordshire mining district.—Apply to Mr. H. Johnson, land and mineral surveyor, Dudley; or to Mr. H. English, Mining Record Office, 5, Shoe-court, Throgmorton-street, London.—A premium will be required. 11

**COLLIERIES IN SOUTH WALES.**—The LANDORE COLLIERIES of the Duke of Beaufort, in the fee of Trewyddva, near Swansea, in the county of Glamorgan, will be OPEN to COMPETITION from and after the 25th of March, 1845.—Any person desirous of treating for those collieries, will be so good as to apply to his Grace's Agent, Septimus Rothwell, Esq., of Heathfield, Swansea; or to Messrs. Watkins and Hooper, 11, Sackville-street, London. 12

**TO CAPITALISTS.—EXTENSIVE COLLIERY, IRON-WORKS, HARBOUR, &c. TO BE LET,** in the Mineral Basin of South WALES, PEMBREY, Carmarthenshire.—TO BE LET, for a term of years, with immediate possession, all that celebrated and well known colliery called the GWSCWM COLLIERY, with the IRON-WORKS, CANAL, and HARBOUR, lately occupied by the Pembrey Coal and Iron Company; together with the spacious RESIDENCE, managers', agents', and workmen's houses, situate at Pembrey, near the Vale of Gwendreath, Kidwelly and Llanelly, in the county of Carmarthen.

The coals, which are bituminous, are of well known quality, being the noted Barnby Pit coals; they comprise several valuable veins, and extend under several thousand acres of land, and, from the unusual facilities for exportation, offer such advantages for working as are possessed by no other colliery in the neighbourhood.

The colliery, which is capable of being immediately worked from the existing pit, has the peculiar advantage of requiring but a comparatively small outlay of capital to render it at once productive—the former workings having been discontinued while in full and profitable supply from an extensive field of most excellent coal, and is free from all the unnecessary which may attach to new collieries.

The harbour, which was constructed solely for shipping coals from the colliery, and lies within half a mile of the pit, on the Burry river, is capable of holding a very considerable number of vessels, of the largest class, in perfect security; and the canal communicates from thence, by means of the Llanelly and Kidwelly Canal, with the Vale of Gwendreath, where an inexhaustible supply of ironstone can be procured for the iron works, which it is considered may be carried with great advantage, as the coals are peculiarly adapted to the manufacture of iron, and the site is strongly recommended, from its position and supply of coals, for the erection of copper works.

The iron works, harbour, and canal, as well as the dwelling houses and other residences, will either be let with the colliery or not, at the option of the tenant, who may be also accommodated with a greater or less quantity of land, as may be desired. Pembrey, which is four miles from Llanelly, and thirteen from Carmarthen, has a daily post to London.

The projected railroad from Gloucester, through the mineral district of South Wales, must pass through this property.

For particulars, and to treat, apply to Mr. Charles Bishop, Llandovery, Carmarthenshire, and to Mr. John Davies Priest, Pembrey, who will show the premises. 13

**TO CAPITALISTS DESIRING PROFITABLE AND SAFE INVESTMENTS.**—TO BE LET, on long leases and advantageous terms, SEVERAL COAL-FIELDS, of the best quality, both BITUMINOUS and ANTHRACITE, with veins of IRON MINE, FIRE CLAY, QUARRIES of STONE, MARBLE, and LIMESTONE, &c., ELIGIBLE SITUATIONS for establishing MANUFACTORIES of any kind, in many cases with the advantage of water power, and other cheap facilities; a large and newly erected BUILDING, with a STEAM-ENGINE and other MACHINERY, capable of being converted to any one or a manufactory, adjoining a railway, within two miles of a floating dock; a most extensive BITUMINOUS COLLIERY and COAL-FIELD, now working 100 tons per diem, and capable of producing twice the quantity, and situated midway between two shipping harbours, each within the distance of two miles.

All the foregoing coal fields and situations have very recommendation by railway and canal with the excellent and improving shipping harbours of Llanelly and Pembrey, Carmarthenshire, and are well worth the attention of persons desirous of safe investment of capital. Long leases will be granted, and every facility and accommodation afforded.

For further particulars apply to F. L. Brown, solicitor, Llanelly, Carmarthenshire, or to John Williams, solicitor, 7, Verulam-buildings, Gray's-inn, London. 14

**THE PATENT SAFETY FUSE,** FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the safest, cheapest, and most expeditious mode of effecting this very important operation. From many testimonials to its superiority, with which the Manufacturers have been favoured from every part of the kingdom, they submit the following letter, recently received from John Taylor, Esq., F.G.S., &c. &c.—

"I am very glad to hear that my recommendations have been of any service to you. They have been given from a thorough conviction of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name as evidence of this."

Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY, Tuckingmill, Cornwall. 15

**TO ENGINEERS, RAILWAY CONTRACTORS, MINING** AGENTS, IRONMASTERS, and OTHERS REQUIRING FINE GEARS or MACHINERY and AXLES of every description.—JOSEPH PRICE'S AUTO-PROVED ANTI-FRICTION GEARING is—after trials on machinery and axles of every kind where maximum friction is to be, or considered to be the most useful, economical, and best preparation of the kind ever offered to the public.

Admission to scientific and practical men can be given, and testimonials of the first excellence.—Samples forwarded on application at the warehouse, Union-street, Wellington-street, Blackfriars-road, London. 16

**OFFICE FOR PATENTS, 7, STAPLE INN, HOLBORN.**—J. WYNMAN, (assistant) has now assumed to Mr. Bennett, informs INVENTORS and PATENTEES that, at his OFFICE, they can obtain

REFERENCE TO A CLASSIFIED LIST OF PATENTS,

from 1617 and upwards, which shows at one view all the Patents ever granted for any particular object, whereby they may save much trouble and expense, and procure information and otherwise obtainable.—BRITISH and FOREIGN PATENTS OBTAINED, and TRIPOLI and ORNAMENTAL DESIGNS REGISTERED.

SPECIFICATIONS carefully prepared, and REPORTS of EMBOLARD effects on INVENTIONS furnished on moderate terms.

PURCHASED and WORKING DRAWINGS executed with accuracy and despatch. 17

**VICTORIA LIFE ASSURANCE COMPANY.**

TRUSTEES.

The Lord Duncan, M.P., Chairman. | Henry Stevens, Esq., Deputy-Chairman.
Benjamin Harvard, Esq. | Charles Sanderson, Esq.

Popular advantages are offered in this Company. Prospectuses forwarded on application.

Profits accruing from lives of persons may assure their policies secure, notwithstanding the 10th assurance may go out of the limits of Europe, without the necessity payment of the premium during such previously discharged.

Credit is half the premium for the first five years allowed on policies effected for the whole term of life.

The policies of five pounds' sterling, half the amount paid, after not four year's premium, may be transferred thereon by the assured.

Advances are also made to persons on real or leasehold property repayable by terms of years, repayable by instalments.

Attention is particularly requested to the detailed prospectuses of the Company, which may be obtained at the office, 18, King William-street, City, or by letter addressed to the secretary. WM. RATRAY, Actuary and Secretary. 18

**TO RAILWAY COMPANIES, CONTRACTORS, COAL** PROPRIETORS, AND OTHERS.—THOMAS PEARSON, MILLWRIGHT, ENGINEER, IRONFOUNDER, BOILERMAKER, &c., LIVER FOUNDRY, LIVERPOOL,

Begs respectfully to inform his friends generally, and the above in particular, that he has recently COMMENCED MANUFACTURING LOCOMOTIVE ENGINES, of a superior description, and will be glad to RECEIVE ORDERS from any party requiring them, being confident that any he may be intrusted with will give entire satisfaction. In proof of which, he begs to refer them to the newly-built engine the *Liver*, of his manufacture, now working on the North Union Railway—its superiority above all others having been tested.

T. P. trusts that, with strict attention, he will be able to turn out first rate work, and at the most reasonable terms. 19

N.B.—All descriptions of boilers, iron vessels, and fire proof work, manufactured at his boiler-yard, West Side, Queen's Dock, Liverpool.

**ANDREW SMITH'S PATENT WIRE ROPE,** FOR MINING, RAILWAY, and SHIPPING PURPOSES.—The Royal yacht *VICTORIA AND ALBERT*, *PENELOPE*, *VIRAGO*, *HERMES*, and several other ships in the Royal Navy, as well as the Merchants' Service, have been FITTED WITH ANDREW SMITH'S PATENT WIRE ROPE; it is about half the size and weight of hempen rope and one third cheaper.—For particulars apply to A. Smith, Princes-street, Leicester-square; or at the works, Millwall, Poplar, London. 20

**R. S. NEWALL AND CO.'S PATENT IMPROVED WIRE** ROPE is now in very EXTENSIVE USE in the MINING DISTRICTS, and on several of the PRINCIPAL RAILWAYS throughout this country. It is almost exclusively used on the Blackwall Railway, where it has been found superior to any other.

It is also used as the RIGGING of the *GREAT BRITAIN* steamer, of 3000 tons and other vessels.

It is one-half the weight of hemp rope—of equal strength.
It is one-sixth of the bulk.
It is cheaper first cost.
It has lasted as long as five hemp ropes, doing the same work on railways.

Specimens and testimonials may be seen, and every information as to its application, &c., will be given at the company's works, GATESHEAD-UPON-TYNE. 21

**STEAM TO INDIA VIA EGYPT, MALTA, ITALY,** ALEXANDRIA, AND THE PENINSULAR PORTS.

PASSAGE TO BOMBAY, MADRAS, AND CALCUTTA.

The Peninsular and Oriental Steam Navigation Company's steam-ships START FROM SOUTHAMPTON THE FIRST OF EVERY MONTH,

arriving at Alexandria about the 14th. The Hon. East India Company's packets leave here for Bombay about the 7th of the month, and for Madras and Calcutta the Peninsular and Oriental Steam Navigation Company's steamers, *Hindostan* and *Bentinck*, or Government steamers. The Peninsular and Oriental Steam Navigation Company have now a steamship on the Mahmoudieh Canal, and other great improvements have lately been introduced into the transit through Egypt. 22

STEAM TO MALTA, ITALY, &c.

A steamer from Southampton leaves the first of every month for Malta, where are steamers to Naples, Genoa, Civeta Vecchia, three times a month.

STEAM TO OPORTO, VIGO, LISBON, CADIZ, AND GIBRALTAR.

A steamer leaves Southampton every Thursday at 8 p.m. for the above places. Apply at the Peninsular and Oriental Steam Navigation Company's offices, 31, St. Mary Axe, London, where only passages can be secured throughout.

**EUROPEAN STEAM-PACKET COMPANY,** ESTABLISHED FOR THE PURPOSE OF

EFFECTING DAILY COMMUNICATIONS WITH THE CONTINENT OF EUROPE

Capital of £250,000, in 10,000 shares, of £19 each.
Deposit £1 per share.

Calls not above £1 at one time, and at intervals of not less than three months.—When half the capital is paid up, the shares to bear interest at 4 per cent. per annum.

BOARD OF DIRECTORS.

(With power to add to their number).

JOHN BAGSHAW, Esq., London and Harwich, Chairman.
Major-General BRIGGS, London, Deputy Chairman.

| | |
|---|---|
| Abraham Bosey, Esq., London | Seymour Hartell, Esq., London |
| Augustus Braamgard, Esq., London | R. W. Kennard, Esq., London |
| James Curtis, Esq., London | Charles Lushington, Esq., London |
| Robert Cranston, Esq., Liverpool | Curtis Reid, Esq., R.N., London |
| | George Thompson, Esq., London. |

*A List of Committees on the Continent will very shortly be published.*

CORRESPONDING NAVAL ARCHITECT.
Christopher D. Hays, Esq.
SECRETARY (pro tem.)
J. A. Franklin, 70, King William-street, City. 23

BANKERS.
London—Messrs. Denison, Heywood, Kennard, and Co.
Hamburgh—Messrs. Abraham Rucat and Co.
Manchester—The Exchange Bank.
Ahona—
Liverpool—Arthur Heywood, Sons, and Co.

SOLICITORS.
Messrs. Hardwick and Davidson, Wrenn's Hall, Basinghall-street, London.

The objects of this company, as fully explained in the prospectus, advertised in this journal on the 5th and 12th inst., are to encourage steam locomotive power, by steam boats, for the purpose of connecting Harwich and Hamburgh, and Harwich and the Hague, by daily communication, to be accomplished by means of the company's boats, the Eastern Counties and the Gloucester and Africa Railways, to almost half the time at present occupied, and at less than half the present expense.

It is intended to apply for a Charter of Incorporation, or Act of Parliament, at Letters Patent for the purpose of limiting the liability of the shareholders to the amount of their subscription.

Applications for shares are to be made on or before the 15th of October, addressed to the secretary, to the solicitors, or to one of the following gentlemen:—J. W. B. May, Liverpool; Sanderson and Heywood, Manchester; and R. R. Watson and Co., London—London, 71, King William-street, City.

**PATENT IMPROVEMENTS IN CHRONOMETERS,** WATCHES, AND CLOCKS.—E. J. DENT, 82, Strand, and 33, Cockspur-street, watch and clock maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public that the manufacture of his chronometers, watches, and clocks is secured by three separate patents, respectively granted in 1838, 1840, 1842. Silver lever watches, jewelled in four holes, 4 gs. each; in gold cases, from £6 to £10 extra. Gold horizontal watches, with gold dials, from 6 gs. to 12 gs. each.—DENT'S PATENT DIPLEIDOSCOPE, or marine instrument, is now ready for delivery. Pamphlets, containing a description and drawings, to be had, to customers gratis. 24

LIFE ASSURANCE AND ANNUITIES.

**AUSTRALASIAN, COLONIAL AND GENERAL LIFE** ASSURANCE AND ANNUITY COMPANY.

Capital of £500,000, in 5000 shares.

DIRECTORS.

| | |
|---|---|
| Edward Barnard, Esq., F.S.S. | Osborne Colquhoun, Esq. |
| Henry Bowlby, Esq. | C. E. Mangles, Esq. |
| Robert Brooks, Esq. | Richard Ommaney, Esq. |
| John Henry Capper, Esq. | William Walker, Esq. |

SECRETARY—Edward Ratray, Esq.

The following are specimens of the premiums charged by this company for the assurance of £100.

| Ages | 20. | 30. | 40. | 50. | 60. |
|---|---|---|---|---|---|
| Annual premium | £1 13 5 | £2 0 5 | £2 11 3 | £3 1 5 | £3 18 5 |

This company offers the advantages of the guarantee of an ample subscribed capital—and participation in nine-tenths of the premiums by those only liable for portions so assumed, with interest upon it, being declared and from the profits every 5 years—a system of accounting, determining, and other events of profit—and of participation as to profits, at the end of every five years.

The assurants in the Australasian colonies are limited for the whole of life, the company offer the guarantee to proceed to and reside in any of those colonies without extra premium, and to pay their assurances there. For residence in New Zealand, a moderate extra premium is charged.

In favour of a board of directors, and agents in all the principal and commercial towns in the kingdom.—The Bank of Australasia (incorporated by Royal Charter, 1835), No. 5, Bishopsgate-street, London. 25

ADVANTAGES.

Assignable participation in the profits of the company, and receive a sum of assurance equal to four times the premiums. Rates can be granted for and completely suiting the circumstances peculiar to England. The company is projected expressly to grant these advantages, and from the advantages it possesses of investing a portion of the funds at a high rate of interest.

AGENCIES.

Terms of agreement for assurances on the lives of officers engaged in civil or in the service of military service in the East Indies and China, may be made at the offices of the company.

AGENCIES IN INDIA.

| | |
|---|---|
| Calcutta | Messrs. Reid, Hardy and Co. |
| Madras | Messrs. Lord and Co. |
| Bombay | Messrs. Remfry, Wright, and Co. |
| Ceylon | Messrs. Anthonisz, Nephew, and Co. |

Prospectuses and full particulars may be had at the offices of the company, 25, Old Broad-street, corner of Threadneedle.

## IMPORTANT RAILWAY MEETING AT MANSFIELD.

A meeting was held at the Town Hall, Mansfield, on Friday, the 6th inst., to take into consideration the advantages of a projected line of railway, in connexion with the London and York, at Newark, and the Sheffield, Leeds, and Manchester, at Sheffield, to be called the "Newark and Sheffield Thorwood Forest Railway." The meeting was fixed for twelve o'clock, at which time a considerable number of gentry, leading and influential agriculturists, bankers of the town and neighbourhood, heavily attended, among whom were Benjamin Outram, Esq., E. V. F. Bagnall, Esq., Francis Hall, Esq., John Chambers, Esq., Henry Bacchurst, Esq., Samuel Ridge, Esq., R. Watson, Esq., Henry Bacchurst, Esq., Wm. Hilton, Esq., Rev. J. Rawlins, J. J. Mansfield, Esq., John Dudley, Esq., John Hopkins, Esq., Richard Greenhalgh, Esq., J. E. Heathcott, Esq., besides many others interested in the measure.

Captain Balmond was called to the chair, and, with his accustomed perspicuity and ability, stated the object of the meeting, as well as his opinion of the benefit that would doubtless result, should the project be carried out; he also read over a statistical table, which he had prepared with great care, of the probable receipts that would accrue from the conveyance of coals, malt, flour, lime, stone, slate, &c., which was attentively listened to, satisfactorily viewed, and corroborated by many practical gentlemen present. After this, he called upon Mr. Bean to read a report on the subject from a committee appointed at a prior meeting, giving a satisfactory account of preliminary proceedings; he also read extracts from a correspondence with merchants and others at Newark, of a very important colour, inasmuch as it showed, from the Exeter Returns of Newark that during the meeting averaged 1843, 81,473 quarters, or 2317 boat, of malt were made at that town alone, which, with 17,000 tons of flour manufactured at Newark annually, are sent to the Manchester market via Nottingham, at a heavy freight. It also appeared that not only would this supply for the Manchester market, but also the malt and flour manufactured to a very considerable extent at Grantham and Stamford, pass along the proposed Newark and Sheffield, or Sherwood Forest, Railway, as the shortest way to Manchester; and, as a further proof of the traffic that might be expected on the line, it was shown, that one merchant alone at Newark was at present paying upwards of 1000l. quarterly for the carriage of his flour to the Manchester market.

The impression of all attending the meeting seemed to be, that this line possesses the greatest advantages, and deserved the unanimous support which every resolution met with.—The survey has been made by Mr. Sanderson, of Mansfield, who stated that two-thirds of the country between Mansfield and Newark was most favourable, and that, with ninety of selection, the undertaking would not be difficult, there being no cuttings of importance, and the soil, being of a sandy nature, would be an object in removal.—The intended line will pass over portions of the estates of the Dukes of Portland, Newcastle, and Devonshire, and of Earl Carnarvon, &c., who, it was understood, had been consulted on the subject. Considerable quantities of coal and other minerals are also found in the lands of these noblemen.

After a long discussion, in which it appeared exceedingly desirable that the object of the meeting be attained, resolutions were proposed, seconded, and unanimously approved (which will be found in our advertising columns); and there remains little doubt that the proposed railway will be adopted, as its advantages to Nottinghamshire and the so abounding counties will be very considerable. Mansfield, which was once so famed for the quantity, as well as quality, of its malt, there is every reason to hope, may once again arrive at the former celebrity—indeed, if the present opportunity be allowed to pass by without availing itself of it, the town must, in these railway times, not only be left behind, but retrograde. Coals, lime, stone, and other commodities, would be supplied to the counties of Lincoln, Norfolk, Rutland, Bedford, and all other counties southward of the London and York Railway, at a low rate, and the produce and agriculturists would have speedy means of forwarding their fat stock and produce from those counties to the Lancashire markets; in fine, it would connect Mansfield (which has hitherto been established) with other lines of traffic, the attainment of which end is very desirable—and we cannot close this notice without heartily wishing the exertions of the individuals promoting the measure may be crowned with success; we feel certain that the thanks of all parties to the projectors of the undertaking are not only due, but will be cordially given.

Before the committee broke up, directions were given to the solicitors to make application to Wm. Cubitt, Esq., F.R.S., to undertake the engineering department on the line, and Mr. Sanderson was appointed surveyor. On the subscription book being opened, upwards of 15,000l. worth of shares were taken in the room, and numerous applications for shares have since been made.

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London and Dover Railway.—During the past week vigorous exertions have been making to put the locomotive power of this line in such a state of efficiency as will for the future insure an exact fulfilment of the company's engagements with the public. Several new and powerful engines have been brought on the line, which will enable the company adequately to grapple with its greatly increasing traffic; and to the goods' department there will speedily be some important changes, the directors having for some time been actively engaged in inquiry, with a view to extensive alterations; great credit is due to them for the zeal with which they have applied themselves to the carrying out the wishes of their worthy partners. Nothing can be more acceptable than the present proceedings of the board; the recent appointment of Captain O'Brien, the new manager, was approved by all the directors, and great expectations are entertained, from his well-acknowledged ability, that his appointment will be attended with the utmost success.

Midland Railway.—It appears that there is no ground for the report, circulated during the past week, that the Midland Counties are endeavouring, in the present pending negotiation, to lease the Sheffield and Manchester Railway. The object, it appears, is to amalgamate this railway and the Sheffield and Lincoln projected undertaking with the Midland Counties Railway, so that the Sheffield and Lincoln Railway is to be the highroad from west to east, as well as the south.

The London and York Line.—It is stated that there will be a coal line between the two York lines, at the recent resolution of the Board of Trade; and the interest existing in the Durham Northern shares would lead us to suppose there is some truth in the rumour.

New Line to Windsor.—An influential preliminary meeting was held at the White Hart Hotel, Windsor, on Thursday last, to adopt measures for a new Windsor Junction Railway, which is to be constructed on the atmospheric principle; it is to consist of two branches—one from Windsor, to form a junction with the Great Western Railway at Slough, and the other (the intention being over Windsor Bridge, on the Berkshire side) to proceed direct to London. A plan of the proposed line has been submitted to her Majesty (upon whose opposition might have been contemplated), and, it is said, approved of.

London and Birmingham and Grand Junction Companies.—It is with great regret we learn that a register has again taken place between these companies, and having taken some pains to ascertain the causes, we are satisfied to state, on good authority, the reasons of the disagreement. In July last, a treaty of amity was signed between the parties, in which it was stipulated that if any difference should arise on the terms of it, or in carrying it out, it should be left to the arbitration of three proprietors on each side, and being chosen. The Grand Junction board, it appears, construed that, in the various instances, the London and Birmingham directors have infringed the treaty, and they give a specific case, and claim the arbitration provided. The London and Birmingham directors refuse to arbitrate, and here the matter rests. The difference has, we understand, no relation whatever to the Shrewsbury Railway, respecting which a long advertisement appears in our columns.—*Railway Record.*

North Wales Mineral Railway Extension.—A plan is about to be submitted to this company for extending their railway from Wrexham to Ruabon, a distance of four miles, to be effected in the best manner which it is proposed to carry it, viz., to be effected in the best manner to the present terminus, a depth of 12 per cent. being gained. There can be no doubt, we think, looking to the valuable mineral property of the district, that the proposed extension is most judicious.—*Railway Record.*

Railway Communication between London and Paris.—The Journal des Débats, in speaking of the application of Mr. Andrew and Monsieur Edouard Blount, of Boulogne, for the concession of a railway from Amiens to Boulogne, London, Hawk and Co., associated this particular line with another great section in France and England, and contemplates in general will derive a great benefit from it—"by means of the railway from Amiens to Boulogne." The Débats continues:—"The two metropolises of the civilized world, the two most important homes of light, liberty, and arts, will have very nearly the same interest in the success of these projects. In the genius of these people, the interests of similar kinds become identified. In the course of three years, connecting as all probability, the journey and expense from Paris to London will be reduced to a single day. Then, the two capitals will be united between the rising and setting of the sun. When [illegible] railway from these two great centres of civilization, the [illegible] arts and commerce are to explore [illegible] which [illegible] the populations on the two sides of the channel, will be [illegible] by the [illegible] of the [illegible] and [illegible] to [illegible] a great understanding about peace, and that great object of humanity is to result a great [illegible] of the whole world, and assure the [illegible] and tranquil progress of civilization for the benefit of the two peoples. It is hardly a dream that the two Governments will succeed together, if it is the business of both, that on each side of the Straits of Dover, in France and England, the railroad shall terminate at some point which shall be accessible from the other, by the least [illegible] into steamers will enhance the [illegible] of this. The [illegible] between the two capitals will [illegible] from 4,000,000 to 4,000,000."

Tenders for Rails in France.—Five tenders were presented for the contract for the rails of the first section of the northern railroad. These tenders were examined on the conclusion of the contract, and the contract has been awarded to M. Rothes Saint Léger, at 9 per cent. below that sum.

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KOLLMANN'S RAILWAY LOCOMOTIVE and CARRIAGE IMPROVEMENT COMPANY,

FOR ATTAINING INCREASED SECURITY AND DIMINISHING THE COST OF RAILWAYS.

*Established pursuant to Act of Parliament of 1st Vic. cap. 56.*

26

Capital £10,000, in 500 shares of £20 each.

Prospectuses, with full details, together with forms of applications for shares and terms for granting licenses, may be had of Mr. George Smith, solicitor to the company, 29, Sterling-street; and of the secretary, Mr. A. W. Barnes, at the offices Adelaide Chambers, Adam street, Adelphi.


## SHREWSBURY AND WOLVERHAMPTON RAILWAY.—

The Directors of the Grand Junction Railway, having read the statement which has appeared in several recent newspapers, bearing the signature of Mr. Grimsby Gore, chairman of the provisional committee of a proposed railway between Shrewsbury and Birmingham Railway, consider it due to their shareholders and themselves to offer the following observations on that statement:—

Believing, then, in the first instance, in the charge made in it,—that the Grand Junction Company have claimed to dictate to their great rivalries "what railway, and what railway only," they shall have, the directors beg to state (though they might have hoped it would not have been necessary for them to disclaim any such pretensions as regards any part of the country), that not only have they never assumed or presumed to set up such a claim, but that, as respects the particular railway now in question, they did not even enter upon the consideration of it until pressed so to do by parties at Shrewsbury. Upon receipt of a requisition, in January last, they obtained from their shareholders a public meeting held and general authority thereby to construct a railway to connect Shrewsbury with the Grand Junction Railway, and they had various surveys made with a view to the discovery of the best line. They soon found, that as regards the north (Manchester and Yorkshire, at least), no point on their line further south than Stafford could be considered as offering any considerable accommodation; whilst, as regards London and the south, they found, that as the Trent Valley Railway would shorten the distance to London, nine miles, as compared with the existing route via Wolverhampton and Birmingham, besides giving a direct communication with Derbyshire and the east, Stafford was clearly the best terminus for the railway from Shrewsbury, upon public grounds—and at the same time that a line to that terminus would be much cheaper than any other which is attainable, and also be the most promising as regards the prospect of traffic, because affording improved communication with the north and east, as well as the south.

Accordingly, the directors made the necessary preparations for bringing the Stafford and Shrewsbury line before Parliament next session—the subscription list was filled and the deposits paid, inhabitants of Shrewsbury taking some shares.

To this point, all that the Grand Junction directors had done was done at the instance, and with the concurrence, of inhabitants of Shrewsbury; "donations," therefore, cannot surely be charged against them. At a later date, however, and which it is material to mention, after the publication of the resolutions of the Grand Junction proprietary authorising their directors to proceed with the line, certain professional gentlemen (for, in the first instance, no professional committee was appointed) brought before the public the project of a line from Shrewsbury to join the Grand Junction line at Wolverhampton, instead of Stafford—and colonies quently proposed to be extended to Birmingham. Communications afterwards took place on the subject of the different Shrewsbury Railways, the result of which was, that the Grand Junction directors agreed, as a compromise to the London and Birmingham Company, and to the new Shropshire party, to adopt Wolverhampton instead of Stafford, as the terminus, here again allowing, surely, proof enough of the directors' approach the two points now in dispute—namely, first, who under the agreement of the 1st of July last, between the London and Birmingham and Grand Junction Companies, were to be the makers of the Shrewsbury and Wolverhampton line, and secondly, whether Mr. Gore's party have or have not adopted that agreement. The following statement will, it is hoped, make it clear that there is no ground whatever for complaint against the directors of the Grand Junction Railway on either point.

First, as to the agreement itself; it is express words states, that the Grand Junction Company shall make the line—and, when it is considered that they were to provide half the capital, and also to guarantee interest upon the total amount, whatever that should be, it surely was most reasonable that they should be the makers of it. In Mr. Gore's statement, however, it is said, that "it is obvious to any impartial observer that the word 'make' is clearly modified and restrained from the meaning sought to be put upon it by the explanation as to the issuing of the line." In refutation of this attempt to explain away the meaning of the word, the directors beg to observe, that the two London and Birmingham directors who made the agreement, at the time that Mr. Gore's party should be the makers of the line, and they proposed to the Grand Junction directors; that the agreement should stand in that form; the latter, however, after discussion of the matter with the London and Birmingham directors, expressly refused to consent to the proposition, and the agreement was allowed into the present form, and signed accordingly on the 1st of July. More need not be said in proof, that of the parties to the agreement, *at the time they entered into it*, intended precisely the same thing. And afterwards proposals the same meaning to the word "make;" and, to show that the London and Birmingham directors held the same opinion at a later date, the following extract from a letter, from which the following is an extract:—

"My understanding of the arrangement between our company and the London and Birmingham is as you have expressed it—namely, that the Grand Junction were to take up the agreement at the point where they had left it. I must say, also, that I contemplated that your company were to be makers of the line, so as to retain its being made, and to that extent the meeting party; but I have invariably expressed my opinion, that unless the making of the line should be by the company guaranteeing the interest, the point at which we had just arrived when the arrangement was made."

It will be observed, that Mr. Gore's party should be the makers of the line—the directors proceed to the other question, whether the Shrewsbury party have or have not consented to that agreement; and it is admitted to be a very material question in the present position of affairs.

In Mr. Gore's published statement it is the letter of their chairman of the 17th July, given by them was that contained in the letter of their chairman of the 17th July, embodying the terms which negotiated with that company as the makers of the line; that letter has never been answered in the slightest degree departed from that position; they have never been answered in the slightest degree departed from that position; they this committee have never in the Grand Junction having the making."

The contract has been quite as distinctly declared, on behalf of the London and Birmingham directors, to the Grand Junction directors, the former have reported to the latter, that the agreement of the 1st July was read over to Mr. Gore and his friends on the 16th July, and that he then "published" out the discrepancy between the terms of the new arrangement and the previously existing agreement for making the line, by which the Shrewsbury party were to be the makers of it, under the direction of a joint committee—whereas, by the new arrangement, the making of it was transferred to the Grand Junction Company." The Grand Junction directors were to accept to Mr. Gore, on the same day, that there was some little difficulty made by Mr. Gore and his friends upon points of the agreement, and that therefore, their official concurrence in it might be a little delayed; but on the 19th

## EASTERN COUNTIES RAILWAY COMPANY'S

**DEBENTURES, BONDS, and LOAN NOTES.**—The directors hereby give Notice, that they are READY TO PAY OFF such of the above SECURITIES as bear an interest of 5 per cent. and fall due in the years 1862 and 1866, and to grant other debentures in lieu of the same, at the reduced rate of interest of 4 per cent. and for such extended periods as may be agreed upon between the company and the holders.—Applications to be made to the secretary, at the company's offices, Shoreditch Station.

By order of the board, A. DULKELEY, Secretary.

Offices, Shoreditch Station, October 11. 28

## LONDON AND NORWICH DIRECT RAILWAY,

THROUGH BURY ST. EDMUND'S AND THETFORD,

*Saving twenty miles between London and Norwich and Yarmouth.*

Capital £700,000, in 35,000 shares, of £20 each.
Deposit £1 per share.

PRESENT PROVISIONAL COMMITTEE.

(With power to add to their number).

The Right Hon. Lord Charles Fitzroy, M.P. Barrington House
The Lord Dover, the Hoo
Sir Thomas Gery Cullum, Bart. Hardwick House
Sir H. E. Bunbury, Bt. Great Barton Hall
Sir Robt. Harland, Bart. Orwell Park
Sir Wm. Rumbold, Little Saxsford Hall
H. S. Waddington, Esq. M.P. Cavenham Hall
Peter Barnes, Esq. Walton, Bumpstead
James Borton, Esq., Bury St. Edmund's
The Rev. Chas. Burton, Wickhambrook
S. Y. Benyon, Esq. Denston Park
Joseph Boreham, Esq. Haverhill
Major Bullock, Bury St. Edmund's
Jonathan Bullock, Esq. Pantlow's Hall, Witham
Mr. Charles Beard, Bury St. Edmund's
Mr. Walton Barrell, Wesley
John Cutts, Esq. Barnfield Hall
The Rev. J. W. Donaldson, Bury St. Edmund's
Rich. Durrant, Esq. Bury St. Edmund's
Rev. O. J. P. Eyre, Bury St. Edmund's
Frederick C. Fitch, Esq. Smith's Green, Bumpstead
Mr. W. Frewer, jun. Bury St. Edmund's
Charles Fiske, Esq. Hempstead
Mr. Saml. Fennell, Bury St. Edmund's
A. Gall, Esq. Bury St. Edmund's
George W. Gent, Esq. Moyen's Park, Bumpstead
Mr. Wm. Goodchild, Kedington
D. Gurteen, Esq. Haverhill
Mr. J. H. Guy, Bury St. Edmund's
Mr. Joseph Shannon Garrett, Pretlow
Mr. Thomas Gayfer, Clare
Thomas Hallifax, Esq. Chadacre Hall
Major Hyde, Clare
Capt. Hubbard, R.N. Bury St. Edmund's
Mr. Robert Harvey, Bury St. Edmund's
J. W. Jardine, Esq. Stoke
Mr. John Kemp, Chevington
W. Langwell, Esq. Little Bridley Hall
Mr. James Linsmer, Bury St. Edmund's
Rev. M. J. Lloyd, Branches Park
Mr. James Lee, Bury St. Edmund's
The Rev. C. B. Lockwood, Bury St. Edmund's
Rev. W. Mayd, Withersfield
Robert Nunn, Esq. Bury St. Edmund's
N. Palmer, Esq. Recorder of Yarmouth
Francis George Probart, Esq. M.D. Bury St. Edmund's
William Pigott, Esq. Pollingham
Mr. C. Punchard, Little Wratting
John Parkin, Esq. Stanner Hall
Geo. Portway, Esq. Bury St. Edmund's
Harry Parkin, Esq. Stanner
Mr. Henry Prigg, Bury St. Edmund's
Saville Shreeve, Esq. Clare
William Henry Sams, Esq. Clare
Rev. T. B. Syer, Great Wratting
Wm. Saltmer, Esq. Bury St. Edmund's
Thos. Thorthill, Esq. Riddlesworth Park
Mr. J. Trevethan, Bury St. Edmund's
Radcliffe Pearl Todd, Esq. Stanner
The Rev. C. Townley, Steeple Bumpstead
R. A. J. Walton, Esq. Haverhill
The Rev. W. Wayman, Great Thurlow
G. St. Vincent Wilson, Esq. Redgrave Hall
J. Worlledge, Esq. Bury St. Edmund's

ENGINEER—Sir John Rennie.

BANKERS.

Messrs. Glyn, Hallifax, Mills, and Co. Lombard-street
East of England Bank, Norwich
Messrs. Oakes, Denston, and Co. Bury St. Edmund's
Messrs. Lacon and Co. Yarmouth
John Worlledge, Esq. Bury St. Edmund's
National Provincial Bank of England, at Bury St. Edmund's
The Edinburgh and Glasgow Bank

SECRETARY—Francis King Eagle, Esq.

SOLICITORS—Messrs. Jackson, Sparke, and Holmes; Messrs. Leach and Son, Bury St. Edmund's.

In pursuance of a resolution, passed at a numerous and influential meeting of the western division of the county of Suffolk, held at the Shire Hall, in Bury St. Edmund's, on the 16th September, it has been determined to open a direct communication between Bury St. Edmund's and London, by means of a junction with the northern and eastern line on one side, and Norwich and Yarmouth, the midland counties, and the north of England by a junction with the Norwich and Brandon line on the other, with probable branches to Sudbury, Newmarket, and Swaffham, and a continuation of the main line to Wells, for which latter purpose a separate company has been already formed.

In addition to the traffic in immediate connection with the populous towns of Bury, Clare, and Haverhill, and their highly productive neighbourhoods, this railway will effect a saving of distance between London and Yarmouth and Norwich of upwards of twenty miles, in comparison with any other line—and will, consequently, command the extended London traffic of those prosperous towns, together with the accumulation which will be furnished both in Norfolk and Suffolk—it will offer an opportunity for beneficial investment of no ordinary character. The line, which will be between forty and fifty miles in length, has been reported upon most favourably by Sir John Rennie to be perfectly feasible throughout, either with or without the adoption of the atmospheric principle.

Upon the advantages of this line to Suffolk and Norfolk in general, and Yarmouth in particular, it is unnecessary to enlarge. Yarmouth has entirely lost the trade with Hamburgh and Rotterdam which she once possessed. The opportunity is now offered to her of regaining it, as this line, in connection with the Steam Packet Company about to be established in that port, offers facilities for post-office and general communication with the continent, and the transmission of foreign produce into the interior of the country, never before offered.

Correct estimates will be prepared as soon as the particular survey now in progress, under the direction and superintendence of Sir John Rennie, has been completed. Allowing, however, the high cost of £16,000 per mile for a double line throughout, the traffic tables show a return of upwards of £10 per cent. upon the capital required.

Applications for shares may be made to Messrs. Bolton, Gribble, and Co., the brokers to the company, 5, Cornhill, London; to the secretary, at the company's office, Market-cross; and to the Solicitors of the company, Bury St. Edmund's; to C. S. Gillman, Esq. solicitor, Norwich, and to Eagle Wharfe, Esq. St. Stephen's, Norwich, from whom plans and prospectuses may be obtained, and to the following shareholders—viz. Bradford, T. Kemp, Esq. Manchester, Messrs. Cardwell and Co., Messrs. Johnston and Bradley, Messrs. Barton and Co.; Blackburn, W. H. Maynes, Esq., T. Rawlinson, Esq., John Radcliffe, Esq.; Birmingham, John Wade, Esq.; Edinburgh, Robert Allan, Esq.; Hull, F. Stamp, Esq., Messrs. Cobleman and Flint; York, W. H. Croskrop, Esq.; Liverpool, Messrs. Davies and Co.; Leeds, Messrs. King and Co., John H. Kitchin, Esq.; Messrs. Parkinson and Co.; Sheffield, Messrs. Garton and Wright; Chester, M. Harrison, Esq.; Bolton, James Garbutt, Esq.; Glasgow, Messrs. M'Ewen and Aird; J. Watson, Esq.

The deposit of £1 per share to be paid upon allotment at any of the above-mentioned banks. 29

Application may be made in the following form:—

*To the Provisional Committee of the London and Norwich Direct Railway.*

GENTLEMEN,—I hereby request you to apportion me ..... shares in the London and Norwich Direct Railway, and I hereby agree to pay the deposit, and to sign the Parliamentary contract and subscribers' deed when required.

Dated the ..... day of .....

Name .....
Residence .....
Profession .....

Notwithstanding the necessity for the deposit, no further expenditure of money will be incurred until after the opinion of the Board of Trade shall have been ascertained, which opinion, if favourable, will, in all probability, secure the sanction of the Legislature to this measure. This arrangement very much diminishes the risk of an expensive and fruitless Parliamentary contest.

No further call will be required till after the sanction of the Board of Trade, when a call, not exceeding 10s. per share, will be made, with successive calls of £1 at intervals, or not less than two months after the passing of the Act.

Interest will be allowed at the rate of 4 per cent. upon the paid up capital until the opening of the railway.

Liability will be limited to the amount of shares subscribed for only.

Committee Room, Market-cross, Bury St. Edmund's, Oct. 12.

All applications for shares must be received on or before Wednesday, the 23d inst. when the lists will be finally closed, and the committee will meet on the 24th inst. to complete the allotments.

## BIRKENHEAD, MANCHESTER, AND CHESHIRE

JUNCTION RAILWAY.

Capital £1,500,000; shares £50 each.—Deposit £5 per share.

PROVISIONAL COMMITTEE.

Joseph Bailey, Esq. M.P.
W. E. Cotton, Esq. M.P., Chairman of the Chester and Birkenhead Railway Company
William Jackson, Esq., Chairman of the Chester and Rhyddlan Railway Company
Joseph Bailey, jun. Esq., M.P.
John Lewis, Esq.
William Potter, Esq. } Directors of the Chester and Birkenhead
William Laird, Esq. } Railway Company
Robert Barbour, Esq. } Manchester
Robert Gardiner, Esq. }
David Harrison, Esq. } Bolton
J. Cheetham, Esq. }
J. Leech, Esq.
James Tyrer, Esq.
Harvey F. Brownrigg, Esq. } Liverpool
Augustus Ashcroft, Esq. }
Joseph Travis Care, Esq. Chesterwalling
J. W. Hanson, Esq. North Parry, Cheshire

ENGINEER—James M. Rendel, Esq. F.R.S. 30

SOLICITOR—Joseph Mackrell, Esq.

BANKERS.

Messrs. Glyn, Hallifax, and Co. London
Messrs. Heywood, Cunliffe, and Co. Manchester
Parrs Bank, Liverpool
Messrs. Barnes and Worrall, Chester

The shares in this company having been allotted, and the arrangements completed for applying to Parliament in the next session, the committee beg to announce the course which the line will take.

The railway will join the Chester and Birkenhead Railway by a branch near Birkenhead, for the Birkenhead traffic, and by a branch near Chester for the Shropshire, Welsh, and Irish traffic—these branches will unite near Hoose, and the line then be continued to Frodsham and Preston Brook (where it will cross the Grand Junction Railway, and form a junction with it), and thence to Manchester by way of Altrincham, down which place a branch will be carried to Bowdon.

At Manchester a junction will be formed with the Manchester and Leeds Railway, after the most diligent enquiries, the committee have determined upon the line they have selected as the one most practicable to execute, and most effective to accomplish the great objects for which the line was designed.

WILLIAM JACKSON, Chairman of the Committee.

Director's Office, Birkenhead, Oct. 13.

## DIRECT NORTHERN RAILWAY COMPANY.

APPLICATIONS for SHARES being continued to be sent in to the office of the Direct Northern Railway Company, the committee beg to intimate, that NO FURTHER LETTERS can be ATTENDED TO, the allotment being completed.

The committee have to repeat their regret that the very great number of applications have rendered it out of their power to comply with many they could have wished to have attended to.

Parties to whom allotments have been made must pay their deposits, agreeably to the letters of allotment, on or before Monday, the 21st inst., to any of the undermentioned bankers:—

London ..... The Union Bank of London, 9, Moorgate-street
York ..... York City and County Banking Company
Edinburgh ..... The National Bank of Scotland / The Edinburgh and Glasgow Bank
Glasgow ..... The Western Bank of Scotland / The National Bank of Scotland
Aberdeen ..... The North of Scotland Bank
Liverpool ..... The Liverpool Banking Company
Manchester ..... The Manchester and Liverpool District Bank 31
Birmingham ..... The Birmingham and Midland Banking Company
Leeds ..... Messrs. Beckett, and Co.
Hull ..... Messrs. Thomas and Robert Raikes and Co.
Huddersfield ..... Huddersfield Banking Company

By order of the committee, WILLIAM AMBINCK, Sec.

Direct Northern Railway Company, 64, Moorgate-street, Oct. 16.

## WORCESTER AND LONDON, AND RUGBY AND OXFORD, RAILWAY.

Capital £1,750,000, in shares of £50 each.
Deposit £1 per share.

PROVISIONAL COMMITTEE.

James Bantling, Esq. Oxford
Jonathan Samuel Browning, Esq. Oxford
Timothy Rhodes Cobb, Esq. Banbury
William Dent, Esq. Sudeley Castle, Gloucestershire and Worcester
Robert Garnett, Esq. Manchester, a director in the London and Birmingham Railway Company
Joseph Ashley Gillett, Esq. Banbury
John Whitmore Isaac, Esq. Boughton House, near Worcester
Henry Joyborn, Esq. Leamington, M.D.
Christopher Hird Jones, Esq. Liverpool, a director in the London and Birmingham Railway Company
Captain C. R. Moorsom, R.N. Birmingham, a director in the London and Birmingham Railway Company
Samuel Sperrett, Esq. Banbury
Charles Tawney, Esq. Oxford
Harvey Berrow Tymbs, Esq. Worcester
Richard Weedon, jun. Esq. Oxford
(With power to add to their number).

ENGINEER.

ROBERT STEPHENSON, Esq.

BANKERS.

Messrs. Glyn, Hallifax, Mills, and Co. London
Messrs. Berwick and Co. Worcester
Messrs. T. R. and E. Cobb, Banbury
Messrs. Gillett and Tawney, Banbury
Messrs. Weedon, Tubb, and Co. Oxford
The Borough Bank, Liverpool

SOLICITORS.

Messrs. Parker and Hayes, 1, Lincoln's Inn fields, London
Mr. S. Carter, Birmingham
Mr. William Taunton, Worcester
Messrs. Hyde and Tymbs,

The line from Worcester, with a branch to the Severn, is intended to pass near the towns of Pershore, Evesham, Stratford-on-Avon, Banbury, Bicester, and Aylesbury, and to join the London and Birmingham Railway in the vicinity of Tring, which has been found, on the whole, to be a more desirable point of junction for public accommodation than Weedon. The line from Rugby to Oxford is intended to pass also by way of Banbury, and will form, for about twenty miles, a portion of the main line from Worcester to Tring. Whilst Worcester, by these means, will be brought within a distance of 119 miles of the terminus of the London and Birmingham Railway at Euston-square, the intermediate country will be connected by the proposed line to Rugby with the eastern side of the kingdom; on the other hand, Birmingham and the midland and northern counties will be thus directly connected with Oxford and the south; and, as a necessary result, the London and Birmingham Railway Company will effect a junction of their existing Warwick and Leamington branch with the proposed lines.

Accurate surveys of the country have been made under the direction and personal superintendence of Mr. Robert Stephenson, who reports that it is free from any considerable engineering difficulties.

Estimates of the traffic have been prepared, showing a return upon the expenditure sufficient to induce the directors of the London and Birmingham Company to lease the line in perpetuity, which they have agreed to do, with a guarantee of 4 per cent. per annum to the proprietors upon the outlay, and half the surplus profits.

A moiety of the shares is reserved for the proprietors of the London and Birmingham Company; and the remainder will be allotted to parties having local interests, and other applicants.

Interest, at the rate of 4 per cent. per annum, will be paid half-yearly on the deposits and calls, from the time of payment.

Applications for shares may be made to the solicitors, or to the following shareholders:—Messrs. Foster and Braithwaite, Old Broad-street, Mr. Robert William Moore, Threadneedle-street, London; Mr. Samuel Woods, jun. Liverpool; or Mr. James Pearson, Birmingham.

FORM OF APPLICATION.

I request that you will allot me ..... shares in the Worcester and London and Rugby and Oxford Railway, on the conditions of the Prospectus; and I agree to take such shares, and to pay the deposit, and sign the subscribers' agreement and Parliamentary contract when required. Dated ..... 1844.

Name .....
Residence .....
Profession .....

*To the Provisional Committee of the Worcester and London and Rugby and Oxford Railway Company.*

## OXFORD, WORCESTER, AND WOLVERHAMPTON RAILWAY.

Capital £1,500,000—shares £50 each.—Deposit £2 10s.

COMMITTEE OF MANAGEMENT.

Frederick Pratt Barlow, Esq. London
Thomas Richard Gregg, Esq. Bristol
Henry Simonds, Esq. Reading
William Tothill, Esq. Bristol
John Rogers, Esq. Chesley
} Directors of the Great Western Railway Company.
Mr. George B. Thorneycroft, Ironmaster, Wolverhampton
Mr. John Barker, Ironmaster, Wolverhampton
Mr. John Parks, eminent manufacturer, Wolverhampton
Edward Terry, Esq. Mayor of Dudley
Thomas Badger, Esq. Dudley
Mr. J. Joseph Rotchell, ironmaster, Dudley
Mr. William Matthews, ironmaster, Carter's Hall, Kingswinford
Mr. Rep. Gillotson, ironmaster, Short-end House, Kingswinford
James Foster, Esq. ironmaster, Stourton Castle, Stourbridge
Mich. Grazebrook, Esq. ironmaster, Audnam, Stourbridge
Richard Hickman, Esq. Clay Works, Stourbridge
Joseph Kinp, Esq. Stourbridge
Mr. Francis Rufford, banker, Stourbridge
Thomas Simcox Lea, Esq. Astley Hall, Kidderminster
Mr. George Brinton, carpet manufacturer, Kidderminster
Arthur Blair, Esq. Spring Grove, Bewdley
Mr. Enoch Bentley, ironfounder, Stourport
William Lewis, Esq. Mayor of Worcester
John Lilly, Esq. High Alderman of Worcester
John Parker, Esq. Worcester
Mr. William Shellard, jun. wine merchant, Worcester
George B. Hudson, Esq. Wick, near Pershore
Mr. T. W. Foster, merchant, Evesham
Mr. H. G. Bosley, banker, Member for the Parish
Mr. Robert Bowman, merchant, Bow-lo, Ross
(With power to add to their number).

ENGINEER—I. K. Brunel, Esq.

BANKERS.

Messrs. Spooner, Attwoods, and Co. London
Messrs. Bolitho and Wrangle, Stourbridge

SOLICITORS.

Messrs. W. G. and W. Hunt, 16, Wymondham, London
Mr. Robert Rising
Mr. Fred. Thomas Rigg } Worcester

The committee of management of this company having determined to take the DERBY LINE from Oxford to Worcester (being the line upon which the Government Commissioners favourably reported in the year 1840), in preference to the line round by Banbury, by which there will be a saving of eleven miles in distance; an arrangement has been this day entered into with the Great Western Company, by which that company have agreed to lease the line in perpetuity, at a rent equal to 4 per cent. upon the gross capital, with half surplus profits, and with a further arrangement by purchase of the interest on any capital beyond such sum sanctioned under the powers usually contained in a Railway Act of Parliament, not exceeding £200,000.

All applications for shares must contain a reference to some banker, broker, or other party of responsibility, unless the applicant be personally known to some member of the committee of management.

Interest on the deposits will be allowed at the rate of £4 per cent. per annum, from the time of payment into the bankers' hands.

Prospectuses, with plan, may be had of the solicitors to the company, to whom applications for shares may be addressed.

London, Sept. 30.

## OXFORD, WORCESTER, AND WOLVERHAMPTON RAILWAY.—No FURTHER APPLICATIONS for SHARES in this company will be RECEIVED after WEDNESDAY, the 23d inst.

W. G. and W. HUNT, Solicitors.
R. RISING,
F. T. RIGG,

Railway Office, Worcester, October 17. 34

## AMERICAN ADVERTISEMENT AGENCY.—Mr. DEACON,

of BALLARDIE, LONDON, twenty-two years accredited ADVERTISING AGENT for every London and Provincial Newspaper, Periodical, &c., solicits ADVERTISEMENTS generally, to be published to ADVERTISE IN NEW YORK, for the INSERTION of ADVERTISEMENTS in all the AMERICAN and CANADIAN NEWSPAPERS, and for general purposes. 35

## KENTISH RAILWAY, FROM LONDON TO THE DOWNS,

THROUGH

WOOLWICH, GRAVESEND, ROCHESTER, CHATHAM, AND CANTERBURY.

*(Length of Line 76 miles).*

Capital £2,250,000, to be raised by the issue of 90,000 shares, of £25 each.
Deposit £1 10s. per share.

PROVISIONAL COMMITTEE.

The Rt. Hon. Lord Harris, Belmont, Kent
The Hon. G. F. R. Harris, Belmont
The Hon. G. A. F. P. S. Smythe, M.P. for Canterbury
The Right Hon. S. R. Lushington, Sutton Court, Kent
The Right Hon. T. Pemberton Leigh, Torry Hill, Kent
The Hon. Arthur Arundel, Dover-street, Piccadilly
Sir John Pitts, Bart. Cornhill
General Sir Thomas Gage Monkton, K.C.H. Claridge House, Kent
Sir John Maxwell Tylden, Milstead, Kent
Abbott, Montague Vernon, Esq. Gravesend, Kent
Ashpitel, William Hurst, Esq. Clapton-square, Hackney
Bell, Matthew, Esq. Orwalds, Kent
Bland, William, Esq. Halfin, Kent
Blyth, James, Esq. Austinfriars
Bradshaw, James, Esq. M.P. for Chatham
Bullock, Capt. F., R.N. Woolwich, Kent
Chapel, Samuel James, Esq. Adelaide pl.
Circling, Edw. Spencer, Esq. Deal, Kent
Dyer, Francis Bradley, Esq. Gore Court, Kent
Etchells, H. J., Esq. Old Broad-street
Eatwaln, John, Esq. Russell square
Gipps, H. Plampin, Esq. Montague-pl. Bryanstone-square
Granella, General, Ospringe, Kent
Greene, Benjamin, Esq. Russell square
Grove, Colonel, Boughton, Kent
Hilton, Henry, Esq., Soho street House, Kent
Hilton, Giles, Esq. Preston House, Faversham, Kent
Hilton, Edward Jones, Esq. Faversham, Kent
Hornby, John, Esq. M.P. for Blackburn
Kendall, H., Esq. Austinfriars
Kennard, R. W., Esq. Upper Thames-st.
Loshington, W., Esq. Somerotham Lodge, Kent
Lake, John, Esq. Hapchild, Kent
Nicoils, Col. Rdw., Shooter's hill, Kent
Oldham, Thomas William, Esq. Southam, Warwick
Page, Capt. S., Charlton House, Somerton
Parker, Capt. John, R.N. Rythorne, Kent
Poore, Rev. Dr., Marston Rectory, Kent
Ricketts, Frederick, Esq. Old Broad-st.
Rigden, William, Esq. Faversham, Kent
Shoreham, Rdw., Esq. Crayford, Kent
Walter, W., Esq. Beringrove, Rolsham, Kent
Ward, Captain James, Bowster Lodge, Woolwich, Kent

(With power to add to their number).

BANKERS.

Messrs. Denison, Heywood, Kennards, and Co. London
Messrs. Arthur Heywood, sons, and Co. Liverpool
Messrs. Cunliffe, Brooks, and Co. Manchester
Messrs. Hammond, Plumpton, and Co. Canterbury
Messrs. Hilton and Co. Faversham

ENGINEERS.

J. U. Rastrick, Esq. F.R.S., F.S.A.; Colonel Landmann, M.I.C.E., F.S.A. 36

SOLICITORS.

Messrs. Lake, Wilkinson, and Lake, 10, Lincoln's Inn.

A main line of railway through Kent, connecting the metropolis with the most populous towns in the county, passing through one of the richest districts in England, communicating with several watering places of great resort, and embracing, in its course, the chief Government depôts and barracks at Woolwich, Chatham, Sheerness, Canterbury, and Deal, is obviously most important, both in a national point of view, and as an investment for capital.

The line now projected will proceed from London by Greenwich, Woolwich, Plumstead, Greenhithe, Northfleet, Gravesend, Rochester, Chatham, Milton and Sittingbourne, Faversham, Chartham, Canterbury, Wingham, Ash, and Sandwich, to Deal, thus accommodating a population, confined merely to the places where stations may probably be placed, amounting to nearly 200,000.

The population residing within ten miles of the railway is more than two-thirds of the entire population of the county of Kent, and the intercourse is so great, that there is no passenger traffic in the kingdom at all approaching it in magnitude. There will also be a considerable traffic in goods, fruit, vegetables, hops, and wool, and a large quantity of sheep, which now travel by the road.

The connection of this railway with all the Government depôts in Kent, and with the Downs, and the prospect of its eventually becoming an important means of communication with the continent (especially in the event of Deal being selected as a harbour of refuge), made a west end terminus obviously desirable, which will be attained by continuing the line from Greenwich by New-cross, Peckham, Camberwell, Kennington, and Lambeth, to join the extensive line of the South Western Railway to a station near Hungerford and Waterloo Bridges. This junction will make an uninterrupted railway communication of 150 miles from east to west, and connect the Government depôts in Kent with those at Portsmouth.

It will also supply to a large portion of the metropolitan suburbs a cheap, direct, and speedy communication with the west end of London, over Vauxhall-bridge, Westminster-bridge, the Hungerford Suspension-bridge, and Waterloo-bridge, and open to them the same means of access to Greenwich, Woolwich, and Gravesend, and, lastly, it will relieve the Kentish traffic from all payment of tolls.

It is intended to secure the facilities afforded by the Blackwall Railway for a direct communication between the towns of the north of Kent and the eastern parts of the metropolis, by the construction of a branch line of about two miles from Woolwich, over the marshes, to a point opposite the Blackwall terminus, where the river may be traversed by a steam-ferry.

The proximity of the Kentish line to the present railway station at Greenwich will enable passengers whose destination is the City or the borough of Southwark to proceed there with but little inconvenience, and this it is hoped may hereafter be removed, by some arrangement with the owners of the Greenwich line for booking and conveying passengers throughout to London-bridge.

By thus providing two distinct outlets, and the most central terminus in the metropolis, the Kentish Railway will secure for its traffic, in the most effective manner, access to every part of London, besides providing a continuous railway communication with Portsmouth, Southampton, and the Isle of Wight.

The estimates of the cost of construction, purchase of land, &c., have been made liberally, to include all contingencies. A considerable portion of the line has been frequently surveyed, and, from the favourable nature of the soil in almost every part, there is little reason to apprehend an excess beyond the estimates, which amount to £1,750,000 (or £25,000 per mile) for the portion from Greenwich to the Downs, and £500,000 for the extension from Greenwich to the west end of London.

The estimates of passenger traffic, framed on the existing steam traffic so far as Gravesend (at unusually low fares), on Stamp-office returns of public vehicles, and from actual observation, obtained to .....

Parcels, private carriages, horses, and dogs .....

Goods, &c. .....

Besides the short traffic between Greenwich and the West End, which will be, at least .....

Making a total of .....

The annual expenses have been calculated in detail, and, there being no tolls payable, they will not exceed .....

Net profit, which, upon an outlay of £2,750,000, will be equal to 7½ per cent.

Further particulars are given in the detailed prospectus, which may be obtained from Messrs. Lake, Wilkinson, and Lake, 10, Lincoln's Inn, or at the offices of the company, 19, Bloomsbury-street-within, London; Richard Nelson, Esq. Liverpool, or Edward Ashworth, Esq., Manchester—to any of whose applications for shares may be addressed.

## CORK AND BANDON RAILWAY,

CONNECTING THE

DISTRICT AND TOWNS OF THE WEST RIDING OF THE COUNTY

WITH THE CITY AND HARBOUR OF CORK.

Capital £700,000, in 20,000 shares, of £35 each.—Deposit £1 10s. (10s. per share, payable on allotment—Remainder not to exceed £10 per calls.

*No shareholder to be liable beyond the amount of his subscription.*

PROVISIONAL COMMITTEE.

(With power to add to their number).

Lord Visc. Bernard, M.P. Castle Bernard
Hon. Henry R. Bernard, Castle Bernard
Colonel Chatterton, K.H., D.L.
Daniel Connor, Esq. J.P. Monte Rosa, Cork
Robert Foster, Esq., Captain R.N. Bandon
Rev. Somers Payne, Upton
Richard Corbett, Esq. M.D. Inchidonnan
Thos. Hawkesworth Bellingham, Esq. Bandon
Richard Travers, Esq. Bandon
Alderman John Maddox, merchant, Cork
John Harvey, Esq. Bandon
Alderman Lloyd, Esq. J.P. Monkgrange
William C. Sullivan, Esq. Bandon
Rt. Hon. Sergt. Hart, D.L., J.P., High Sheriff County of Cork
Sir Anthony Perrier, Cork
Thomas R. Sandford, Esq. J.P. Sunday's Well
William Lane, Esq. Victoria House
Michael Roberts, Esq. J.P. Mountbrown
James Scriven, Esq. J.P. Gurranes
James Gillespie, Esq. Bantham
Joseph M'Mahon, Esq. Cork
Wm. James Shaw, merchant, Kinsale
Robert T. Bernard, Esq. J.P. Bandon
Henry Herrick, Esq. Woodlands
John Nash, Esq. Albany

STANDING COUNSEL.

John Fleming, Esq. Lincoln's Inn.

ENGINEER.

Charles Vignoles, Esq. F.R.A.S., M.R.I.A. Consulting Engineer. 37
F. and B. Lynde, Esqs. M.I.C.E.'s, Acting Engineers.

SOLICITORS.

J. C. Hayward, Esq. 17a, Great Brunswick-street, Dublin, and 16, Lynch-walk, Cork.
George Parsons, Esq. Manchester-buildings, Parliament-street, Westminster.

SECRETARY AND LONDON AGENT—Edward Hervey, Esq.
MANAGING DIRECTOR FOR LONDON—L. M. Thompson, Esq.

BANKERS.

The Provincial Bank of Ireland and its branches.
Union Bank of London, 6, Moorgate-street, Lothbury.

Prospectuses may be had, and applications for shares be made to Mr. E. Hervey, the secretary, at the company's temporary offices, No. 4, Manchester-buildings, Parliament-street, Westminster, London; Mr. T. E. Sullivan, Bandon; or of the Wills, stock and share-brokers, Royal Bank buildings, Dawling-green, Liverpool; Hunter, Potter and Smith, stock and share-brokers, Leeds; Messrs. Gregsons and Flint, stock and share-brokers, Hull; Mr. Henry Cameron, stock-broker, 17, Collegegreen, Dublin; and Mr. John M'Donnell, 15, Academy-street, agent at Cork.

FORM OF APPLICATION.

*To the Provisional Committee of the Cork and Bandon Railway.*

GENTLEMEN,—I hereby request you will apportion me ..... shares in the above proposed railway, and I engage to pay the deposit of £2 10s. per share upon such allotment as you may be pleased to make, and to sign the subscription contract required by Parliament, and any the subsidiary agreement.

I am, Gentlemen, your obedient servant,

Name .....
Residence .....
Profession, trade, or calling .....
Date of application .....

All applications for shares must contain a reference to some banker, broker, or other person of responsibility.

## CALEDONIAN RAILWAY.—COMPARATIVE TABLE of the DISTANCES between important PLACES, by the CALEDONIAN and other lines of RAILWAY:—

| NAMES OF PLACES. The figures denote the population. | Distances by the Caledonian Railway. | Distances by the North British Railway. | Distances by the Glasgow, Paisley, and Greenock Railway. | Distances by the Edinburgh and Glasgow Railway. | Advantage in favour of the Caledonian compared with the North British Railway. | Advantage in favour of the Caledonian compared with the Edinburgh and Glasgow Railway. |
|---|---|---|---|---|---|---|
| EDINBURGH and LEITH—185,410. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. |
| To Dundee—51,462 | 91 | — | 139 | — | 48 | |
| Carlisle—22,511 | 98½ | 108½ | 172 | 97 | 73½ | |
| Liverpool—385,627 | 227 | 234 | 296½ | 225 | 69½ | 71½ |
| Manchester—316,169 | 219 | 229 | 302½ | 223 | 83½ | 79½ |
| London | 401½ | 412 | 479 | 414 | 77½ | 77½ |
| GLASGOW—274,533. | | | | | | |
| To Dundee | 67 | — | 69 | — | 2 | |
| Carlisle | 130½ | — | 133 | — | 2½ | |
| Liverpool | 259 | 261 | 263½ | 260 | 4½ | 1½ |
| Manchester | 251 | 253 | 255½ | 252 | 4½ | 1½ |
| Newcastle—49,232 | 199½ | 171 | 197 | 195½ | 2½ | 3½ |
| London | 437½ | 484 | 489 | | 46½ | 44½ |
| PAISLEY—84,391. | | | | | | |
| To Carlisle | 126½ | — | 119 | — | — | 7½ |
| Liverpool | 255 | — | 249½ | — | — | 5½ |
| Manchester | 247 | — | 239½ | — | — | 7½ |
| London | 433½ | 479 | 475 | 464 | 45½ | 41½ |
| PERTH—19,527. | | | | | | |
| To Dundee—28 | 1467 | — | 1441 | — | — | 2½ |
| Carlisle | 1543 | 1581 | 1471 | 1493 | 37½ | 21½ |
| Liverpool | 2743 | 2781 | 2671 | 2693 | 37½ | 21½ |
| Manchester | 2743 | 2781 | 2671 | 2693 | 37½ | 21½ |
| London | 4873 | 4911 | 4841 | 4844 | 37½ | 29½ |
| AIRDRIE and COATBRIDGE.* | | | | | | |
| To Liverpool | 2911 | — | 2891 | — | 20 | 20 |
| Leeds—151,654 | 2793 | 2813 | 2713 | 2793 | 20 | 20 |
| Birmingham | 2924 | 2943 | 2793 | 2943 | — | 150 |
| CARLISLE—20,012. | | | | | | |
| To Greenock—46,169 | 1223 | — | 1351 | 1223 | 128 | 128 |
| Stirling—6007 | 1177 | 1275 | 1351 | 1317 | 97½ | 97½ |
| Falkirk—9189 | 1151 | 1211 | 1271 | 1251 | 60 | 60 |
| Linlithgow—2799 | 1119 | 1203 | 1253 | 1223 | 84 | 84 |
| Haddington—3206 | 1161 | 1179½ | — | 60 | — | 18½ |
| Perth—19,527 | 75 | — | 135 | — | 60 | 60 |
| Falls of Clyde | 1543 | 1615 | 1651 | 1603 | 72 | 72 |
| Dunkeld | 1543 | 1579 | 1611 | 1603 | 36 | 60 |

* These towns form the centre of the Iron Districts of Scotland.

## NOTICE TO HOLDERS OF CALEDONIAN RAILWAY SCRIP.

—The provisional committee of the Caledonian Railway Company hereby intimate, that the SUBSCRIPTION CONTRACT required by the Standing Orders of Parliament to be entered into preparatory to an application for an Act, is now READY to be EXECUTED, and that copies of it will LIE for the SIGNATURES of the SCRIPHOLDERS, from Wednesday the 16th, till Wednesday the 30th of October current, both included, at the following places:—

London—at the office of Henry Francis, Esq. 57, Threadneedle-street.
Liverpool—at the office of Messrs. Clay and Smith, Union court.
Carlisle—at the office of G. G. Messenger, Esq. solicitor.
Edinburgh—at the office of Messrs. Hope and Oliphant, W.S.
Glasgow—at the office of Messrs. Mitchell and Co. 26, Miller street.
Lockerby—at the office of James Davidson, Esq. writer.

And the provisional committee require the scripholders to subscribe such contract before the expiration of the above-mentioned period, and give notice that the shares and deposits of such as fail to do so will be liable to forfeiture, in terms of the provisions in that behalf contained in the subscribers' agreement.

It will be necessary for scripholders to produce their scrip certificates, in order that the same may be registered, and stamped in connexion to the Parliamentary Contract, as no person can be allowed to subscribe the name who does not exhibit scrip for the amount of stock for which he is a subscriber, and certificates will not be afterwards recognised by the company which have not been so produced, registered, and stamped.

By order,
D. RANKINE, Secretary.

London, 13th, 10.

*Railroad referred to, from the Subscribers' Agreement.*

And the several subscribers hereto do further promise and agree and bind themselves severally and respectively, and their respective heirs, executors, and administrators, while so required, from time to time, to subscribe the said contract all such Parliamentary Contracts as are or may be required by the Standing Orders of Parliament, to be entered into previously to applying for the said intended Act or Acts of Parliament, and also all such further and other deeds, documents, and assurances, as shall from time to time be required by the committee of management for the better giving effect to the premises, or any of such subscribers being to execute the same; and in the event of any of such subscribers failing to execute the same, or any of the deeds, documents, or other assurances, aforesaid, within the space of twenty days next after notice given by or on behalf of the committee of management, for that purpose, that it shall and may be lawful to and for the said committee of management, to absolutely forfeit to or for the use of the company all the shares in the undertaking, together with their several rights to the shares in which such deposits have been paid, and all their rights of account and other rights whatsoever of the one part to equity to anywise relating to the premises.

## PRACTICAL TUNNELLING.

Just published, with Twelve Lithographic and Forty-six Wood Engravings, price One Guinea, a new work on

**PRACTICAL TUNNELLING**, explaining in detail, the setting out, the construction, and cost of such works.

By F. W. SIMMS, F.R.A.S., F.G.S., M. Inst. C.E., C.E. 46

Sold by Messrs. Troughton and Simms, 136, Fleet street, and Messrs. Hughes, Marshall, and Co., London.

## GREAT BRITAIN MUTUAL LIFE ASSURANCE SOCIETY

16, WATERLOO PLACE, LONDON.

*Vice Chancellor* COTTENHAM, *Chairman.*

WILLIAM MURRAY, Esq., *Deputy Chairman.*

PECULIAR ADVANTAGES OFFERED TO POLICY HOLDERS IN THIS INSTITUTION

An extremely LOW RATE OF PREMIUM, without participation in the profits but with the option, at any time within five years, of paying up the difference between the declared Bonus and the Guaranteed Bonus, and thus becoming entitled to the whole, and entitled to a full participation in the profits.

Extract from the Guaranteed Scale of Rates, for an assurance of £100, for One Year, Seven Years, and the whole Term of Life.

| ANNUAL PREMIUM | | | | | | | | | WHOLE LIFE. | |
|---|---|---|---|---|---|---|---|---|---|---|
| AGE. | ONE YEAR. | | | SEVEN YEARS. | | | | | | |
| 20 | £1 | 0 | 0 | £1 | 1 | 0 | | | £1 | 11 |
| 30 | 1 | 0 | 0 | 1 | 1 | 0 | | | 2 | 4 |
| 40 | 1 | 0 | 0 | 1 | 1 | 0 | | | 3 | 0 |
| 50 | 1 | 0 | 0 | 1 | 1 | 0 | | | 4 | 1 |
| 60 | 1 | 0 | 0 | 1 | 1 | 0 | | | 5 | 5 |
| 70 | 1 | 0 | 0 | 1 | 1 | 0 | | | 6 | 11 |

£10 per cent. more are declared in the prospectus.

A. S. IRVING, Managing Director. 41

RAILWAY AND GENERAL, MERCANTILE, AND ASS DOMESTIC ARTICLES FROM BIRMAN, &c.

To the wife of Simpson's dreary week | A fairy tree, and really not
And her two children, or rosebud sisters, | Bramble—to me indeed a rose—
Just published, the Seventh Edition, | to a second acquaintance, price 2s. 6d.
one to post to and address, for 42

## SELF PRESERVATION: A Popular Essay on those concealed

diseases of the generative system, resulting in nervous debility, exhausting to nervous habits, prostration of the generative powers, incapacity, impotency, barrenness, and homicidal tendencies, nervous irritability, sympathy, gonorrhœa, gleet, stricture, syphilis, indigestion, impurity of the blood, with many disorders of the urinary passages, &c. illustrated with cases. By SAMUEL LAWRENCE, consulting surgeon, 5, Burton street, Burton crescent, Member of the London Hunterian Medical Society, &c. author of "Syphilitic Disease," &c.

The various processes of urine, bougies, and gum are the admitted privileges of empirics, while, from the secrecy of their practice, cannot be exposed thereby to ridicule. Such, then, among others, the most advisable treatment, and, by its perusal, many additional cases will be satisfactorily adjusted that without it or its appeal, prove to the world the ignorance of the practitioner.

Sold by the Author, 11, and 12, Dalmeny-place, corner to Seaton, St. Pancras-road, Camden-town; and by Mr. Sutcliffe, 39, Bishopsgate-street, and Mr. Hannay, 63, Oxford-street, London.

## THE SILENT FRIEND: a medical work, on Mental Fatigue,

Nervous Diseases, consequential weakness, nervous derangements, &c., with Practical Remarks on Nervous Debility, Hypochondriasis, Hysteria, Epilepsy, Spasms, &c. By a MEDICAL GENTLEMAN, many years resident in Paris. Published for the author's fees and 20 years' experience, by the Booksellers, Longman and Co., Paternoster-row; Simpkin and Co., Stationers'-hall-court; Bohn, 12, York-street, Covent-garden; and Sherwood and Co., Paternoster-row, London.

The Twelfth Edition, price 2s. 6d., free by post, 3s. 6d.,

## THE LIVERPOOL GUIDE TO HEALTH;

or, Medical Friend; containing plain and practical directions for the treatment of all diseases, whether of a local or constitutional character, with or without medicine, and the whole forming a complete system of domestic medicine, adapted to the wants and circumstances of every family. Illustrated by numerous cases, and a variety of engravings. By a MEDICAL GENTLEMAN, many years resident in Paris. Published for the author's fees and 20 years' experience, by the Booksellers, Longman and Co., Paternoster-row; Simpkin and Co., Stationers'-hall-court; Bohn, 12, York-street, Covent-garden; and Sherwood and Co., Paternoster-row, London. 43

## TO ARCHITECTS, BUILDERS, AND OTHERS.—TO BE

SOLD, a HANDSOME CAST-IRON GRECIAN PORTICO, with six noble fluted iron columns, 24ft. high, about ONE THOUSAND CUBIC FEET OF MOUNT SORRELL GRANITE STEPS. The whole situate convenient for canal transit. Apply to trout (with real name and address) "L. Z." Post-office, Birmingham. 44

## CORNWALL RAILWAY, FROM PLYMOUTH TO FALMOUTH.

Capital £600,000, in 16,000 shares, of £30 each.—Deposit £3 per share.

No shareholder to be responsible for more than the amount of his shares.—Interest to be allowed to the shareholders, at the rate of 4 per cent. per annum on all paid-up calls, from the date of payment until the railway is completed.

PROVISIONAL COMMITTEE.

J. T. TREFFRY, Esq., *Place, Chairman.*

The Right Hon. the Earl of Falmouth, Tregothnan
The Right Hon. the Earl of St. Germans, Port Eliot
The Right Hon. Lord Clinton
The Right Hon. Lord Wodehouse
The Right Hon. Lord Eliot, M.P. Port Eliot
Sir Charles Lemon, Bart., M.P. Carclew
E. W. W. Pendarves, Esq., M.P. Pendarves
W. Tyringham Praed, Esq., M.P. Trevethow
Edmond Turner, Esq., M.P. Truro
John Allen, Esq. Lobkeard
John Barlow, Esq. Penzance
Bastow Rogers, Esq. Plymptom
C. R. Bruud, Esq. Falmouth
Clement Carlyon, M.D. Truro
William Carne, Esq. Rosemundy
G. C. Fox, Esq. Grove hill
S. B. Fox, Esq. Perranarworthal
John Gwatkin, Esq. Pare Bolcon
John Nelson, Esq., Doctors' Commons
The Rev. Canon Rogers, Prestwe
T. J. A. Robertus, Esq. Lanlyvetroch
George Smith, Esq. Camborne
William Tweedy, Esq. Truro Vean
W. M. Tweedy, Esq. Alverton
John Vivian, Esq. Penmalenick
Michael Williams, Esq. Trevivian
William Williams, Esq. Tregullow
John M. Williams, Esq. Scorrier

With power to add to their number.

And the directors of the Great Western, Bristol and Exeter, Bristol and Gloucester, and South Devon Railway Companies, who will be nominated hereafter.

ENGINEER.
Captain W. S. Moorsom, C.E.

BANKERS.
Messrs. Tweedy, Williams, and Co., Truro and Falmouth.
Glyn, Hallifax, Mills, and Co., } London.
Fynel, Pate, and Co.

SOLICITORS.
Messrs. Smith and Roberts, Truro.
W. G. Hunt and Son, 10, Whitehall-place, London.

SECRETARY (*pro tem.*)—P. P. Smith, Esq. Truro.

The object of this undertaking is to connect the port of Falmouth with the naval station at Plymouth, and, by the South Devon and Bristol and Exeter Railways, with Bristol, where the great lines of railway communication with the metropolis and the north of England now meet; and thus to bring Falmouth, the most westerly port in the Channel, within eleven hours of London, and fourteen hours of Liverpool and Manchester.

The works of the South Devon Railway, from Exeter to Plymouth, being now in rapid progress, with a view to completion in two years, the time has arrived when it becomes essential to bring forward the plan for a western extension, in conjunction with the Great Western, Bristol and Exeter, Bristol and Gloucester, and South Devon Railway Companies. 45

The provisional committee having laid the plans and estimates of construction and the traffic case in detail before the directors of those companies, they have agreed to unite in contributing £35,000 to the capital of this railway.

The associated companies having thus identified themselves with the undertaking, the Cornwall Railway Company will have the advantage, in its operations, of the advice and assistance of members of their boards, and the works will be carried on with the approbation, and under the supervision, of the experienced and talented officers of those companies.

A large proportion of the leading landed proprietors in the county have given assurances of support in land and money. A considerable local connexion has been formed, and a large number of shares have been taken up, and no opposition or difficulty is anticipated in obtaining the Act. The necessary steps have, therefore, been taken to bring a bill before Parliament in the next session for constructing the Cornwall Railway.

From the surveys that have been made by Captain Moorsom, C.E., it appears that the line would pass through Truporter, within three quarters of a mile of St. Gerrans, touching Liskeard, near to Robiston and Lostwithiel, through Par and St. Austell, by St. Stephens and Trevillian to Truro; from Truro the course of the line would be towards Penryn and Penmere Cross, to connect with the great mining and woollen districts of this county, and from thence by Pennarenth and Penryn to Falmouth. The proposed line will pass through the richest and most densely populated parts of these districts, the limits of the population and prosperity of which are unlimited. A large coal mining, commercial, and agricultural districts of Cornwall. In the principal and constant passenger traffic already exists, of a description which would be immediately increased by the facilities of railway communication.

The line will be connected on the north with the Wainsbridge and Redruth Railway, the Newquay Railway, and the Caradon Railway; and on the south with the Par and Pentewan Railways, and the Looe and Liskeard Canal, from each of which a considerable amount of mineralon traffic will be brought upon the Cornwall Railway, and the communications with the ports on the north and the south coasts are greatly facilitated.

The eastern mining districts of Cornwall and Devon, around Callington, Tavistock, and Liskeard, are much connected with the central and western mines of St. Austell, Truro, Penzance, and Redruth, Camborne, and Penzance, and between those populous and important districts a constant and increasing intercourse exists.

The completion of the Railway from Penzance, which, passing through the great western mining districts, will join the proposed line of the Cornwall Railway between Truro and Falmouth, and for which a bill is to be brought before Parliament next session, will bring a great accession of traffic from those districts.

The Cornwall Railway will not only be in itself important and of great local advantage, but will, in fact, be the terminus of a metropolitan trunk line, and also the terminus of a line from the great manufacturing districts of the north; so that the services which leaves London in the evening will be at Falmouth in the morning, after eleven hours journey, and the passengers from Manchester or Liverpool may arrive at Falmouth in fourteen hours.

It will also be the westerly link of the great chain of coast lines now formed, or in progress, from Dover on the east to Penzance in the west, and will thus eventually receive the traffic of those districts, flowing to and from our western possessions.

The well known advantages and capabilities of the port of Falmouth, and the report, 1840, by inquiry into the comparative merits of the ports then suggested for the mail packet station — that if a railroad existed to the South West Land's End, and a harbour were constructed in that neighbourhood, where the mails might with facility be put on board and landed, they would undoubtedly commence that harbour to the adoption of Government — make it evident that the construction of the proposed railway would render Falmouth the best port in the kingdom for the outward and inward bound mails for the West Indies, the Peninsula, the Mediterranean, Africa and India, and the packets for the South American ports. That this port will be largely used by passengers proceeding by those packets, and also by passengers arriving from and departing for our foreign possessions in sailing vessels, is evident from the anxiety always felt by those who have endured a long sea voyage to reach the shore, and from the desire which most persons feel to avoid the delays and danger of the Channel navigation. The reasons which now induce railroad Companies to run their passengers, will apply with greater force to Falmouth to embark their passengers, as they will be within eleven hours of the metropolis.

The largely increasing number of vessels which, even under the present mode of travelling, visit Falmouth for passengers or cargoes, at Falmouth, shows that expectations of traffic to a large extent may be well founded on those grounds; but, in the calculations now submitted, the committee have confined themselves to the most moderate views upon the existing trade, which is more sufficient to show that this undertaking will prove a highly advantageous investment.

The estimated expense of the line, including the cost of land, preliminary and Parliamentary expenses, stations, and working stock, does not exceed the sum of £600,000, which is to be raised by 16,000 shares, of £30 each.

The accompanying estimate of traffic, deduced from very careful observation made at twenty-three different stations on the roads, shows the following results:—viz.

| | |
|---|---|
| From passengers by coaches and other public conveyances | £56,575 |
| Post chaises, private carriages, carts, pigs, &c. | 13,000 |
| Parcels, goods, &c. | 9,000 |
| Coal, wood, wine, cattle, fish, and vegetables | 11,000 |
| | 2,000 |
| The conveyance of the mails | 1,500 |
| | £93,075 |
| Estimated annual cost of working, 40 per cent. | 37,230 |
| The remainder | £55,845 |

This calculation, which shows a return of upwards of 9 per cent. on the capital, is made upon principles adopted in recent bills before Parliamentary Committees, and it does not include the carriage of any of the mineral produce of the county, or of existing railroads, or of districts other than those named, nor is any credit taken for the large increase which must be anticipated from the probable return of the packets and vessels, and from the natural increase of passengers who will embark or disembark at Falmouth when their ships are not bound direct to London, and from the general increase of commerce and intercourse.

Cornwall possesses within itself great facilities for the construction and maintenance of railways. The mineral foundations, from which engines and other machinery are to be erected, to all parts of the county—the able engineers who are to conduct the works—and the skill and ingenuity of the iron and brass founders, will all contribute to the cheap and good construction of the line and works.

The committee cannot but express their fullest confidence that the above-named and other important and its immediate bodies—its rich and important mineral districts, the ports, existing positions—agricultural, safety and expedition of the traffic, and facilities to any points in the kingdom—its genial climate, promising healthiness and comfort to the tourist or invalid—its social claims, presenting inducements and advantages to the wealthy proprietors of its soil, and the enterprising capitalists the result of investment—the early commencement, will at once contribute to produce a remunerative return for the capital invested, and secure to Cornwall that pre-eminence in railway enterprise which it has enjoyed in the days of the turnpike roads, when the mail coaches were selected on the high road to the Indies. Parliament, and trade, the advantages of the route.

The usual clause will be taken to the Act to allow interest, at the rate of 4 per cent. per annum on the deposits and on subsequent calls, from the time of payment until the railway is opened for traffic, and no subscriber will be entitled to any dividend, until the line be completed, and then not beyond the amount of the interest.

CORNWALL RAILWAY.—The publicare respectfully informed, that the attention will appear shortly to subject for the consideration of Parliament, and that no PROXIES or AUTHORITIES can now be received, except in the order of the provisional committee. 45

P. P. SMITH, Secretary.

Truro, October 17.

## NEWARK AND SHEFFIELD, OR SHERWOOD FOREST, RAILWAY.—A PUBLIC MEETING of the inhabitants of MANSFIELD

and neighbourhood was held at the Town Hall, on Friday, the 9th inst., "to take into consideration the advantages of a projected line of railway, in connexion with the London and York, at Newark, and the Sheffield, Leeds, and Manchester, at Sheffield," JAMES SALMOND, Esq., in the chair,

It was proposed—

1. That the committee to be appointed at this meeting do use their best endeavours for the formation of a railway from Sheffield, at which place a junction should be made with the Sheffield and Manchester Railway, and thence via Chesterfield and bridge with the Leeds and Manchester Railway, and thence via Chesterfield and Mansfield, to join the projected London and York Railway at Mansfield. 47

2. That such railway shall be called the "NEWARK AND SHEFFIELD, OR SHERWOOD FOREST, RAILWAY."

3. That the following gentlemen constitute the provisional committee, with power to add to their number:—T. S. Godfrey, Esq. Balderton; Robert Gill, Esq.; Wm. Ratcliffe, Esq. M.P.; George Robinson, Esq. Winthorpe; Henry Hunt-worth, Esq.; William Hoskins, Esq. Pressley Vale; John Thorpe, Esq. Newark; R. V. P. Burnell, Esq. Winkburn Hall; John Isaac Marbrot, Esq. Woodhouse Grove; J. E. Brodhurst, Esq. Crow Hill; Francis Hall, Esq. Mansfield Woodhouse; Thomas Hardcastle, Esq. Biddworth Dale; Esq. Park Hall; John Chambers, Esq. the Hirst; E. T. Coke, Esq. Woodhouse Grove; Martin Furniss, Esq. Mansfield; Jonathan Hardcastle, Esq. Biddworth Dale; Captain Trithock, Southwell; John Donkley, Esq. Mansfield; Henry Brodhurst, Esq. Woodhouse; Captain Foster, Esq. Mansfield; Henry Brodhurst, Esq. Woodhouse; West Bank; Solomon Foster, Esq. Mansfield; Robert Watson, Esq. Mansfield; Richard Greenhalgh, Esq. Carr Bank; and William Gotting, Esq. Mansfield.

4. That Messrs. R. and S. Capars, of Newark, Messrs. Parsons and Bros, Mansfield, and Messrs. Wilson, Tunnay, and Pierson, Sheffield, shall henceforth act in concert together, as the solicitors of the undertaking, and that they do forthwith draw up a prospectus, showing the objects and prospects thereof.

R. V. P. Burnell, Esq. proposed, and J. E. Brodhurst, Esq. seconded—

That the thanks of the meeting be given to James Salmond, Esq., for his able conduct in the chair.

## NEWARK AND SHEFFIELD RAILWAY,

COMPLETING
THE UNION OF THE COUNTIES OF NOTTINGHAM AND DERBY WITH WEST YORKSHIRE, LANCASHIRE, AND CHESHIRE.

Capital £500,000, in 24,000 shares, of £20 each.
Deposit £1 10s. per share.

PROVISIONAL COMMITTEE.

R. V. P. Burnell, Esq. Winkburn Hall
J. E. Brodhurst, Esq. Crow Hill, Mansfield
J. Brandon, Esq. Newark
Henry Brodhurst, Esq. Woodhouse Place
John Chambers, Esq. the Hirst
E. T. Coke, Esq. Woodhouse Grove
John Donkley, Esq. Haughy Hall
S. Foster, Esq. Mansfield
Martin Furniss, Esq. Mansfield
William Flint, Esq. Halam
S. T. Forster, Esq. Southwell
T. S. Godfrey, Esq. Balderton
Robert Gill, Esq. Newark
S. Greenhalgh, Esq. Carr Bank, Mansfield
Robert Gill, Esq. Mansfield Woodhouse
William Gotting, Esq. Mansfield
William Hoskins, Esq. Pressley Vale
Samuel Hart, Esq. Mansfield
J. Hardcastle, Esq. Biddworth Dale
Francis Hall, Esq. Park Hall
W. F. Handley, Esq. Newark
Geo. Hutton, Esq. Carlton on-Trent
J. Handley, Esq. Meatham Grange
William Heathworth, Esq. Farnsfield
Charles Lindley, Esq. Mansfield
W. J. Learoyd, Esq. Southwell
J. J. Marbrot, Esq. Winthorpe Grove
The Mayor of Newark
Col. Robinson, M.P. Watnall Hall
George Robinson, Esq. Winthorpe Hall
Captain Piper, R.N. Southwell
William Sadleir, Esq. Broomhill Grange
J. Salmond, Esq. Mansfield Woodhouse
S. Sykes, Esq. West Bank, Mansfield
S. Sykes, Esq. Mansfield Woodhouse
R. Sykes, Esq. Radcliff
William Taylor, Esq. Newark
John Thorpe, Esq. Newark
Thomas Trithock, Esq. Southwell
Robert Watson, Esq. Mansfield
William Wylde, Esq. Southwell
J. C. Wylde, Esq. Southwell
J. C. Williams, Esq. M.D. Nottingham
R. Warsnop, Esq. Westhorpe, Southwell
J. J. Wragg, Esq. Woodhouse Hall

(With power to add to their number.)

ENGINEER—Joseph Gibbs, Esq.
SURVEYOR—Mr. George Sanderson.

BANKERS.
London and Manchester—Messrs. Jones, Loyd, and Co.
Sheffield—The Sheffield and Rotherham Banking Company
Mansfield and Chesterfield—Messrs. Robinson and Brodhurst
Chesterfield—The Chesterfield and Derbyshire Banking Company
Newark—Messrs. Handley and Co. and Messrs. Gordney and Hutton
Southwell—Messrs. Wylde and Co.
Nottingham—Messrs. I. and I. C. Wright and Messrs. Moore and Robinson's Banking Company.

SOLICITORS.
Messrs. R. and S. Capars, Newark; Messrs. Parsons and Bros, Mansfield.

LONDON AGENTS.
Messrs. Barker, Rose, and Norton, 16, Mark-lane.
Mr. S. B. Langley, Assistant Secretary.

This undertaking, commencing on the banks of the navigable River Trent, at Newark, passing through the towns of Southwell and Mansfield, and connecting itself at Chesterfield with the existing and projected midland railways, will form a continuous and direct communication between the agriculture and producing districts of Nottinghamshire and the south eastern parts of the kingdom on the one hand, and the large consuming towns and districts of West Yorkshire, Lancashire, Cheshire, and the port of Liverpool, on the other.

The railway will also form the connecting link between Manchester, Sheffield, and the metropolis, and will afford, by means of the London and York line, the shortest communication from the metropolis to those important towns.

A careful examination of the country through which this line will pass, by engineers of acknowledged eminence, enables the promoters to state, that it may be connected with facility, and that the character is such as to justify a confidence that it must prove highly remunerative to the proprietary, taking into consideration the great amount of traffic which must necessarily pass along it, whether as regards passengers, merchandise, and agricultural produce, or minerals—inasmuch as the district is not provided with any means of transit beyond the ordinary turnpike roads.

Twelve daily coaches are now required to convey the passenger traffic through the district within this line will accommodate, at once demonstrating its importance, and the necessity which exists for its construction.

This line, intended to communicate with the existing Mansfield and Pinxton Railway at Mansfield, will form the nearest and most direct route that can be made between the agricultural districts to the east and south coast of Newark, and the great central coal field of Derbyshire and Nottinghamshire, and thus enable the inhabitants of those extensive districts to supply themselves with coals of every quality at considerably less than two-thirds of the present price.

The whole country north and south will, by this railway, and the others with which it will communicate, be brought within easy reach of the well known chalybeate and other springs.

The promoters are confident, after a careful analysis of the traffic which will come upon this line, to state, that a profit of at least 7½ per cent. will be realised upon the estimated capital of £500,000, after deducting 40 per cent. for working expenses.

A deposit of £1 10s. per share must be paid on the allotment of shares—and the balance of subscribers will be limited by the Act of Parliament to the amount of their respective shares.

Power will be taken in the Act to allow interest at the rate of £5 per cent. per annum on the deposits, or such per cent as all future calls, from the date of each payment into the credit of the whole line, or until a dividend be declared.

As a considerable portion of the shares are already applied for, no application will be received after the 15th of November next, on which day the committee will meet to allot the shares.

The subscribers' agreement and Parliamentary contract will be ready for signature at one of the times the deposits are required, and a copy will lie for signature at one of the committee's leaders of each of the following places:—London, Manchester, Sheffield, Chesterfield, Mansfield, Southwell, Newark, and Nottingham.

Subscribers will be required from all applicants for shares who are not known to some members of the committee, the solicitors, or responsible shareholders.

Applications for shares, in the form below, are requested to be made to the solicitors, Messrs. R. and S. Capars, Newark, and Messrs. Parsons and Bros, Mansfield, Messrs. Barker, Rose, and Norton, 16, Mark lane, the London agents; or to the following chemists:—Mr. Wilkinson, 1, St. Mildred's court, Poultry, London; Mr. T. W. Tuck, 5, Bartholomew-lane, London; Mr. Hall, 5, Market-street, Liverpool; Mr. J. Dunnill, Manchester. 48

FORM OF APPLICATION FOR SHARES.

I request you will answer to me shares in the Newark and Sheffield Railway, upon the terms of the prospectus; and I agree to take such shares or any less number that may be allotted to me, and to pay the deposits upon the same, and execute the Parliamentary contract and subscribers' agreement when required—and the ordinary provisional agreement to the prospectus, in the form

Dated 1845. Name
Residence
Profession or occupation

To the Provisional Committee of the Newark and Sheffield Railway, Mansfield.

## VESTA or CAMPHINE SPIRIT LAMPS, General Report on,

by ANDREW URE, M.D., F.R.S., Professor of Chemistry, &c. October, 1845.—"Having tested a variety of Camphine lamps during the preceding three months, I am convinced the PATENT VESTA LAMP of Mr. Taylor is not merely the best, but it is the only one hitherto made which can be used with comfort in closed apartments. If ever the first spirit lamp constructed on right principles, keeping in view the peculiar nature of Camphine spirits, and being endowed by a correct specification, leaves no room to expect another equally good. In this lamp the burner is completely isolated from the reservoir by a ring of wood or other non-conducting material placed between them, and so contrived that the heat from the flame into the camphine spirits they contain cold, whereas when such a tube passes through the reservoir, for the admission of air to the inside of the flame, without being insulated from the latter as to all other original burners, the spirits become so as to evaporate briskly, so as to emit acrid and offensive fumes, the pillars grown, some of the flame and fumes are not, and when used with powerful spirits lamps the chimneys of the flame are usually discoloured by the fumes. The fumes being in fact from these spirits not wholly consumed, but the chimneys of the flame characters and are to be easily distinguished by the interior of the flame. It affords particularly the brightness, steadiness, and clear white colour of the flame, which, when supplied with pure camphine spirits, is without burning by such supplied, as to constitute the spirits of camphine are putting into grooves cut, and easily, if they be inserted in large wicks, and the large consuming towns and districts of West Yorkshire, Lancashire, Cheshire, and the port of Liverpool, on the other. 49

**LONDONDERRY AND ENNISKILLEN RAILWAY.**—Capital £300,000, in 12,000 shares of £30 each. Deposit £2 10s. per share.

PROVISIONAL COMMITTEE.

Right Hon. the Earl of Charlemont, Lieut. of the county Tyrone
Right Hon. the Earl of Rosse
Right Hon. the Earl of Wicklow, Lieut. of the county Wicklow
Right Hon. the Earl of Erne, Lieut. of the county Fermanagh
The Right Honourable the Lord Mayor of London
Sir Robert A. Ferguson, Bart. M.P., Lieut. of the county Derry
Sir James Stewart, Bart. Fortstewart
Sir Edmond Hayes, Bart. M.P. and D.L.
Sir Robert Bateson, Bart. Castrues, J.P.
Alderman Humphery, M.P. Governor of the Hon. the Irish Society
The Hon. H. A. Cole, M.P. for Enniskillen
Rev. John Grey Porter, Belleisle
Colonel Barton, Waterfoot, Portglo, D.L.
William R. Gilbert, Esq. M.P.
William Edmond Forrest, Esq. } London Provisional Committe of the
William H. Theiss, Esq. } Dundalk & Enniskillen Railway
John G. Frith, Esq.
Francis Macnaghten, Esq.
George Tyrrell, Esq.
George Whitmore, Esq.
George Hoyte, Esq. Bessmore, Raheny
William Henry, Esq. Mountjoy-square, Dublin
Thomas Mooney, Esq. Kilmacud House, Dublin
Richard Wright, Esq. Pembroke-place, Dublin
Peter Eckersley, Esq. Hollybrook-park, Dublin
Edward Atkinson, Esq. Carrickbrennan House, Dundalk
John Strathon, Esq. Dundalk
Ninian R. M'Intire, Esq. Clover-hill, Dublin
Connlly M'Causland Lecky, Esq. Londonderry
Hugh Lyle, Esq. Carnagrove, R.L.
William Brown, Esq. Camber House
William Haddell, Esq. Mayor of Derry
William Macky, Esq. Derry
Patrick Gilmour, Esq. Derry
Andrew A. Walt, Esq. Derry
Robert M'Intire, Esq. Derry
James T. Macky, Esq. Derry
J. W. Johnston, Esq. Tyny
William Lenthom, Esq. Thornhill, Derry
John Moon, Esq. Derry
Robert Bond, Esq. St. Columb's
William F. M'Intire, Esq. Derry
John Leathem, Esq. Derry
Oliver Bond, Esq. Pennyburn
Francis Rogan, Esq. M.D. Derry
Stewart Gordon, Esq. Derry

FREDERICK H. HEMMING, Secretary to the London Committee.
PITT SKIPTON, Secretary to the Derry Committee.
SIR JOHN MACNEILL, Engineer, L. L. D., F. R. S.

SOLICITORS.

Timothy Tyrrell, Esq. Guildhall, London; Samuel Law Crawford, Esq. Londonderry.

LONDON BANKERS.

Messrs. Roberts, Curtis, and Co.

IRISH BANKERS.

The Bank of Ireland, and its branches.
The Provincial Bank of Ireland, and its branches.
Royal Bank, Dublin.
Northern Bank, Belfast
Belfast Bank } and their branches.
Ulster Bank

It is material to state, that on application to the Honourable the Irish Society, who have so much interest in the land upon which part of the line is intended to be made, they came to the following resolution; and there is every reason to believe that they will eventually give the land without charge:—

It was resolved—

"That in the opinion of this society, the construction of a railway from Londonderry to Enniskillen will be highly beneficial to the public, and also to the estates belonging to the society. This court is therefore disposed to facilitate the formation of such a line of railway; and, upon the production of the plans and sections thereof, to give the subject its most deliberate and favourable consideration."

Applications for shares to be made at the company's office, Moorgate-street-chambers, London; and to the provisional committee, Londonderry.

**SOUTH METROPOLITAN PURE WATER COMPANY.**—Capital £300,000, in shares of 10l.—Deposit 10s. per share.

TRUSTEES.

(Until the Act of Parliament is obtained.)

Robert Biddulph, Esq., Charing-cross.
Thomas Grissell, Esq., Lambeth.
H. Weston, Esq., Borough Bank.

ENGINEER—Mr. James Easton, Grove, Southwark.

Prospectuses, containing forms of applications for shares, and every information, may be had of the secretaries,

JOHN GALSWORTHY, 15, Ely place, } Joint
E. H. BRAMAH, 6, Great Winchester street, } Secretaries.

**SOUTH METROPOLITAN PURE WATER COMPANY**—NOTICE.—The SHARES in this company will be ALLOTTED on the 15th of November.

JOHN GALSWORTHY, } Joint
G. H. BRAMAH, } Secretaries.


## NOTICES TO CORRESPONDENTS.

The numerous advertisements which appear in our columns of to-day—several of which arrived at a late hour—prevents the insertion of various papers, as also some Editorial remarks. We purpose next week again presenting a SUPPLEMENT (gratis), when we shall endeavour to give insertion to the favours received, as also do justice to one or two subjects to which our attention has been directed.

Several communications and papers are unavoidably omitted.

Received—J. M. (Hull)—B. B. (Wentworth)—M. P. (St. Cloud)—P. B. (City).


# THE MINING JOURNAL,

**Railway and Commercial Gazette.**

LONDON, OCTOBER 12, 1844.


It was our intention this week to have rendered an abstract or epitome of the evidence adduced on the coroner's inquest held on the bodies of the NINETY-FIVE individuals whose lives were lost by the late melancholy accident in the Haswell Colliery. Circumstances, however, prevent us from entering into those details which we expected to have presented to our readers—it being our desire to have afforded *material* on which to ground those measures which are not only essentially necessary, but which must be enforced.

We hope to gather the information desired in a few days, and to place it before our readers, with a diagram, and such observations as may aid the Government in their investigation—as the data which we shall submit will be the result of inquiry and investigation on the part of practical men.

The construction of a line of railway through Cornwall has been oft mooted in our columns, and its advantages observed upon—while the apathy displayed on the part of those most interested alone prevented the measure being carried out. The rage, however, which exists for railways, appears at last to have awakened our Cornish friends, and now "one and all" agree that a railway is not only indispensable, but, "letting up the whole," they appear to have arrived at the conclusion, that it will be remunerative for the capital employed. A difference of opinion has been expressed as to whether the south, or central, line be preferable; and were we to decide without regard to the interest accruing on the capital employed, we might be disposed to take the northern line. As we, however, must look at the one and other with reference to "returns"—for such is "our custom," as applies to all matters connected with the county—we must needs say, that the south line not only presents advantages over its rival, from the population contracting upwards of 300,000 inhabitants in the towns through which it passes and with which a connexion is formed, but it also secures the support of the Great Western, with the Bristol and Exeter, and other companies, who have subscribed 250,000*l.* towards the capital required—one of the best evidences, if any were necessary, of the opinion entertained of the advantages which must accrue from the formation of the line.

It is seldom that we touch on railways, nor should we now do so, if that the district through which the line is proposed to be carried was not one which we consider "our" own. It passes through a mining district, and, if no other advantage were afforded but that of the facility which it will present to the London adventurer to visit the mines in which he is embarked, we confess such alone would be sufficient to induce us to uphold it. It is, however, the more satisfactory in adverting to the project, to be able to state, on information acquired from personal inquiry, that independent of those advantages which we more immediately contemplate, the line must, in a commercial point of view, be productive, and return a fair interest on the capital embarked—hence the numerous applications for shares in the undertaking, which we are glad to learn far exceed the required capital; while the business habits of the chairman and other members of the provisional committee ensure economy and application.

We shall next week present to our readers the views taken by the provisional committees of both lines, and, in the meanwhile, leave them to form their own opinions as to the advantages put forward by the one and the other.

## BOLANOS MINING COMPANY.

[FROM A CORRESPONDENT.]

The following are the results of operations at this company's mines in the district of Zacatecas, from January to July, inclusive:—

| 1844. | San Nicolas & San Clemente. Profit. | Loss. | Hacienda. Profit. | Cost of research in Malanoche & W. Mines |
|---|---|---|---|---|
| Jan..... | .... .. | $4,517 6 1 | $6 5 2 | $4,375 1 3 |
| Feb.... | $6,429 4 3 | .... .... | 1,339 4 4 | 3,913 7 3 |
| March.. | 31,492 2 4 | .... .... | 4,024 1 4 | 3,836 7 2 |
| April .. | 19,583 0 3 | .... .... | 1,936 2 6 | 5,236 3 3 |
| May .. | 18,653 6 3 | .... .... | 2,953 3 4 | 5,370 7 4 |
| June .. | 5,462 2 6 | .... .... | 1,329 5 1 | 6,604 7 3 |
| July... | 6,377 0 0 | .... .... | 2,981 0 4 | 4,616 7 4 |
| Balance | .... .... | 83,472 2 2 | .... .... | .... .... |
| | $87,990 0 3 | $87,990 0 3 | $13,793 7 1 | $34,197 2 0 |

Of the $83,472 profit from San Nicolas and San Clemente, the company's share is seven-twelfths..... $48,692
The hacienda profit is wholly the company's ..... 13,799

Total ..... $62,491
Deduct cost of research in Malanoche and western mines ..... 34,197

Net ..... $28,287

From which it appears that the workings at San Nicolas and San Clemente, in the first seven months of this year (all as yet advised), have supplied 34,000 dol. for works of research (which, in Malanoche, are now of great interest), and have a clear profit of 7 dol. per share.

This is merely a profit and loss account, and does not embrace the working capital in Mr. Penny's hands, nor the property at the "Bolanos district," nor that with the directors.

SALE OF SHARES IN MINES.—An important sale of mining shares took place on Wednesday, at the Auction Mart—Mr. Wharton presiding on the occasion. Most certainly that gentleman did ample justice to the interests of those whom he represented, although we could have wished he had spared the time of those who attended. Three hours, and those to us long hours, were occupied in the sale, and many remarks (we say it in all good nature) might, we think, have been spared, and which would have "spared" us, inasmuch that the value of the several mines was pretty well understood by those who were buyers. In one or two instances different lots certainly met with different prices, and the biddings of one or two parties for particular shares, were looked upon rather suspiciously. We believe that the sale, which must have realised something like 10,000*l.*, was *bona fide*. The prices were, in some instances, far below their value—judging from private bargains; while, in one or two cases, something like 10 or 20 per cent. was given over and above that at which shares might be got in the market. This, Mr. Wharton may congratulate himself upon, as well as his employers. What may be the feelings of the possessors of those particular lots perhaps they will confine to themselves.

GOVERNMENT ENCOURAGEMENT TO RAILWAYS IN FRANCE.—The national importance of discovering the most economical method of working steam-engines and railways has been far more liberally encouraged by the French Government than they have had the credit for in this country. We have been favoured with a letter from a distinguished authority, from which, among other matters, we learn, that the Government and Chambers have appropriated certain sums to the testing of several systems of railroads, and especially the atmospheric system, the system of M. Arnoux, that of M. Pecqueur, and that of Hallette, of Arras. No *reward* has yet been offered for the best system of railroads; but, doubtless, from the excellent spirit already evinced, they will, ere long, adopt so probable a means by which the fruits of genius might be elicited and fostered, and from which France may be so materially benefited. The Government grant being specified cannot be applied to any purpose but that, and therefore, should any system better than those known hitherto be proposed, a new application to the Chambers would be necessary. Now, the Government has delegated its right to a company which is to make the experiment—1st, of Samuda's system, up to the town of St. Germain; 2d, of that of Hallette, for about 2000 metres; 3d, of that of Pecqueur, for 500 metres—and the grant of 1,800,000*f.* is made over to the company of St. Germain Railroad for the above purposes: moreover, as a supplementary subsidy, the town of St. Germain grants 200,000*f.*—What an example this to England.

PEARSON'S NEW LOCOMOTIVE.—We have received from a correspondent the following additional particulars respecting this new engine, to which we referred in last week's *Journal*:—On Monday last the *Lion* performed her trip to Preston with forty loaded waggons (240 tons), which she took up the Boar's-head incline with great ease; and having had eleven more connected at the foot of Coppul incline, ascended it and entered Preston with the whole fifty-one, or 306 tons, besides weight of engine and tender. In the middle of Boar's-head incline she was stopped, in consequence of a train being on the main line, and overcame the dead weight by starting again, and ascending the hill with apparent ease. These facts can be corroborated by the chief engineer of the Preston and Wyre Railway, who witnessed the performance. On comparing the feats of this engine with that of Mr. Kearsley's (noticed in your *Journal*), you will see the *Lion's* is far the greatest, as see the proportions in—1. The Boar's head incline being 1 in 100, and that mentioned by Mr. Kearsley 1 in 500. 2. Mr. Kearsley's engine has 15-inch diameter cylinders, that of the *Lion's* 14-inch—making a difference of forty-six inches in the areas of the two pistons.—3. Mr. Kearsley's engine has 2-feet strokes, the *Lion* has only 20-inch.—We shall be glad to receive further details.

PLATING STEEL BY A SOLUTION OF SILVER.—The last Number of the *Pharmaceutical Journal* contains an account of a new and ready method of plating steel by immersing the steel to be coated in a solution of hyposulphite of silver and soda. "This solution, remarkable for its intensely sweet taste, is readily obtained by dissolving recently precipitated chloride of silver in a solution of hypo-sulphite of soda, and though the steel may be plated, as stated above, by immersion in the solution, it will be found more advantageous in practice to use a *paste*, formed by moistening a little whitening with the solution, with which the surface to be plated should be rubbed over." It appears that whilst in some instances the silver deposited "presents a perfectly uniform and adhering surface," in other cases its precipitation "is attended with a roughening of the surface" of the steel—an objection which the writer anticipates will be overcome, as the process receives general attention. Should this anticipation be realised, the discovery will be found of no less utility in its application to the arts than of present interest as a new fact in metallurgical science.

IMPROVEMENT IN THE STEAM-ENGINE.—We are informed that the greatest improvement made in the steam-engine since the days of Watt is now about being patented by Mr. Samuel Moyle, of Bourne House, Cornwall, civil engineer, which, it is said, will effect a saving of at least 50 per cent. in the consumption of fuel. Great as the advantage arising from this improvement will be to the mining interests, equally great will it be to railroads on the atmospheric principle, and still greater to steam navigation, who will thereby be enabled to perform voyages twice the distance they now perform in accomplish.

EXPLORATION OF WATER UNDER ELECTRICAL INSULATION.—M. Becrel suspended two similar cuprons of eight and a half inches diameter by silk strings, over a stove that was heated daily. In each vessel eight and a half ounces of water was poured; one of the vessels communicated with the earth by a copper wire. At the end of twenty-four hours, 1 oz. 270 grs. had evaporated from the insulated cuprons, and 2 oz. 161 grs. from the other, making a difference of 343 grs. in favour of the cuprons in communication with the earth. The same result was obtained with the heat of the sun.

## THE NEW METHOD OF EVAPORATION OF M. ADOR.

M. Ador is one of the most distinguished inventors of the present time, whose last and most important discovery consists of a novel apparatus for producing steam. The result of an experiment made by Messrs. Armengaud, civil engineers, proves that the working of this new plan of generating steam is much superior to the ordinary method. We give the following report of those gentlemen, which will sufficiently explain the nature of the new apparatus, and the advantages that may be expected from its adoption:—

REPORT.

Having been ordered by Messrs. Ador and Bidault to prove the results of which the new system for distilling fuel was capable, when applied to the evaporation of water, and which is the patented invention of M. Ador, we repaired to the foundry of Madame Jammetel, where the apparatus was fixed up, and which we were enabled to examine minutely. This apparatus of M. Ador is composed of a cylindrical boiler of copper, 1 metre 0.30 centimetres in diameter, and 2 m. in length, and inclosed in a brick furnace, from the end of which it projects by 0 m. 40 c., or thereabouts. Under this boiler, in front of the furnace, is a cast-iron retort of a form nearly elliptical, having an internal length of 1 m. 70 c., and an extreme diameter of 0 m. 53 c., and a minimum one of 0 m. 27 c. This retort is for the distillation of coal, and was heated by means of coke placed in a grating underneath. On the side, and in the same furnace, were two pneumatic heating tubes of 1 m. 70 c. in length, and of 0 m. 34 c. internal diameter, constructed of cast-iron plates of about 5 millimetres in thickness, which are to receive the condensed air by two piston pumps, rectilineor and alternating, each being of the following dimensions:—Internal diameter, 0 m. 325 c.; the course, 0 m. 235 c. The diameter of the pipe which conducts the condensed air by the two pumps with the heating tubes was 0 m. 04 c. in one part of its length, and 0 m. 03 c. near the tubes. These tubes, as well as the retort, communicate with the interior of the boiler. The view, therefore, of this invention of M. Ador, is to effect the evaporation of water by the combustion of gases resulting from the distillation of coal, and brought in contact with a current of hot air, and then to utilise these gases and the adust air as an additional motive power to that of the steam from the engendered water. The apparatus works in the following manner:—They charge the retort with coal, as is done in the ordinary gas machinery, to about three parts of its capacity. The boiler is also filled with water to the ordinary level, according to the work which is to be performed, when the fire is placed on the grating, and they go on heating till the retort arrives at a temperature sufficiently red-hot for inflaming the gas by a light, and its combustion by a current of air. At this moment they commence pumping and sending the air into the tubes, in the interior of which it heats itself, so as, in going out, to inflame the gases in the interior of the boiler. The result of this combustion is, that the water is heated, and soon gets into an ebullition. Therefore, if we collect the steam which is disengaged, as well as the gases and the adust air which combine with it, there is obtained a motive power so disposable as to be used like ordinary steam. We must remark here, that in this operation the gases, being entirely burnt, if we consume in the grating the coke resulting from the distillation, there ought to be no smoke from the chimney, and this we have proved in the most decided manner. After having made ourselves perfectly acquainted with the nature of M. Ador's apparatus, and its operation, we proceeded to work in the following manner:—The apparatus having worked overnight, we caused the retort to be perfectly emptied, as well as the grating underneath, when we placed in the retort a quantity of coal, about 60 kilogrammes. We filled the boiler with a cubic metre, or 1000 litres, of water, and as the furnace was still hot, we observed that the temperature of this water was at the beginning of the operation 50° centigrades; we also weighed out 40 kilogrammes of coke, so as successively to aliment the grating. After this, we caused the retort to operate, and placed the fire on the grating at five minutes before three o'clock. Up to half-past three, the fire remained very inactive; at thirty-three minutes past four, the gas was inflamed, by opening the cock of a small escape tube placed in the interior of the furnace, and used for the purpose of knowing the degree of distillation at which we arrived, but it did not burn without some difficulty, and it was not until half-past five that the gas was found to burn in an efficient manner by a continuous current of air; at this time the pumps were not going, for which purpose two men were placed at each extremity of the beam which moved the pumps, when we perceived that the water of the boiler had preserved its primitive temperature of 50°, and that there had been no portion of heat used to heat the water of the boiler, whilst the temperature of the products of the combustion was 120°. The pumps were kept going, and the grating was alimented until a quarter before seven o'clock, at which time the steam from the water commenced forming. At a quarter before eight, we found 24 litres of water evaporated, and at ten minutes past eight 40 litres; as the boiler was open at the top, this steam disengaged itself with the gas and the adust air. The 40 kil. weighed at the commencement of the experiment was consumed, and the grating was alimented with a new supply of coke, when we continued going till ten o'clock, after some short intervals of stoppage, between eight and ten o'clock, for slight repairs. At the above hour the experiment ceased, when the total quantity of water evaporated was found to be 145 litres, and the addition to the coke was 12 kil. 50 cents. On the next day, the 14th, we opened the retort, from which we took 45 kil. of coke, so that 15 kil. of gas had been consumed, and served for the evaporation of 145 litres of water. We drew out from under the grating 11 kil. 50 cent. of dross, and from the cinder 0 kil. of combustibles. On this quantity we might have employed again 7 kil. 50 cent., so that the total quantity of coke consumed on the grating was 45 kil., of which 12 kil. were dross.

THEORY OF THE OPERATIONS.

1. *Produce of gas.*—Weight of the coal inclosed in the retort, 60 kil.; the coke produced, 45 kil.; gas produced, 15 kil.

2. *Produce of the air pumps.*—Volume produced by strokes of piston, 19 litres; for both the pumps, 38 litres; number of the strokes of the piston per minute, 45; volume of medium air, 700 litres; the pumping was for 270 minutes; thus the air sent into the heating tubes was 700 × 270 = 189,000 litres.

3. *Work performed.*—145 kil. of water reduced to steam; 145 × 1700 litres = 246,500 litres at the pressure of one atmosphere; the 189,000 litres of heated air escaping with the steam at 100° augmenting by one-third of volume, consequently give a result of 252,000 litres at the pressure of one atmosphere—the 15 kil. of gas forming a volume of 15,000 litres at about the same pressure; the total work is, therefore, 513,500 litres; besides, there has been raised 1000 litres of water from 50° to above 100°.

4. *Estimate in horse-power.*—We may calculate that in a steam-engine going at one atmosphere, there must be 700 litres of steam at 100° to produce the power of one horse per minute. Now, the 513,500 litres of steam and gas having been produced in 100 minutes nearly, the work would be thus: 513,500 ÷ 100 ÷ 700 = about four horses. The 145 kil. of steam only, at the pressure of one atmosphere, would have produced: 246,500 ÷ 100 ÷ 700 = 1 horse 857—that is to say, less than 2 horses.

5. *Expense of fuel.*—There was used 105 kil. of coke on the grating; on this quantity we had, of combustible 84 kil., of dross 11·5 kil., which have not been consumed, admitting that we might on this quantity have employed again 7·50 kil. We found 45 kil. of coke consumed on the grating; and, as on the 60 kil. of coal inclosed in the retort we obtained 45 kil. of coke, there was a difference consumed of 15 kil. The consumption of fuel was, therefore, 45 + 15 = 60 kil. On this quantity we ought to deduct, at least, 20 kil. for heating the retort and the heating tubes, before the production of gas, and the elevation of the temperature of the water in the boiler. Consequently, the real consumption is 40 kil., employed as follows:—1. To produce 15 kil. of gas; 2, to reduce to steam, at 100° at least, 145 kil. of water; 3, to heat 145 kil. with air, arising from the 189,000 litres ÷ 770 = 245 kil.; 4, to heat 1000 litres of water from 50° to 100° at least.

6. *Comparison with the ordinary method of evaporation.*—With an ordinary boiler, and burning coal, we should have consumed, to produce the 145 kil. of steam at 100°, 145 ÷ 6 = 24 kil.; and to raise the 1000 kil. of water from 50° to 100°, say, at least, 10 kil.—making 34 kil., which would give less than two horses. We therefore see that one assisted to test of half the efficacy of that of M. Ador. It is true that we have used the motive power of four men, or about half a horse's power, to move the pneumatic pumps. Even admitting other losses which we have not provided for, still two strokes as a saving by this method of M. Ador of from 40 to 50 per cent. If we add to this the advantages of completely burning the smoke, much greater benefits may be looked for from this new invention. This apparatus of the inventor will have the following advantages:—1.

The boiler entirely inclosed in the furnace, so as not to be liable to get cooled by contact; 2, in place of a single retort, there will be three, two of which to work constantly, so as to obtain a regular and continuous pressure; 3, the air pumps would work by a continuous power, so as to have a more energetic action, and be more favourable for the combustion of gas.—Signed by Messrs. ARMENGAUD.—*Journal des Chemins de Fer.*

## ORIGINAL CORRESPONDENCE.

### COLLIERY EXPLOSIONS.

SIR,—Having read an account of the late appalling catastrophe in the Haswell Colliery, my mind has been led to the consideration of this important subject, with a view to prevent, if possible, a recurrence of such melancholy accidents. May I be allowed to make the following suggestions?—viz.:—1. That a committee of practical viewers, selected from different colliery districts, be deputed to investigate the present mode of ventilation in the northern collieries.—2. That only one man should be appointed to take charge of the safety lamps in each pit, to cleanse and supply them with oil and wick, and to keep them in an effective state for use.—3. That a new species of light, not requiring trimming by the workmen, should be substituted for the one in present use, and the lamp so constructed that the workmen cannot have access to the interior of it.—Assuming that this last suggestion is practicable, I have already directed a course of experiments to be made thereon. EDWARD BAGNALL.

*Bandpits, Birmingham, Oct. 15.*

### ON THE PROPERTIES OF WIRE ROPE.

SIR,—Being a constant reader of your scientific and widely-circulated *Journal*, I have derived much pleasure, for some years, from perusing your able comments on the properties of wire rope, among other subjects of interest to the mining world. In your last Number I observe a long advertisement, put forth by Mr. Andrew Smith, with "Caution" attached to it, respecting the fitting of the iron ship *Richard Cobden*, with wire rope for standing rigging, at Liverpool. In the first place, may I ask you, Mr. Editor, if Mr. Smith considers himself the only patentee, as he states in his advertisement that the rigging of the *Richard Cobden* is a "spurious manufacture"—and, certainly, the result of its application in that particular case gives a long way to prove something being very wrong—if it is really true that "Mr. Smith's agents at Liverpool mentioned the builders and owners of the ship when in the act of fitting the wire rope rigging that it would not stand, but go overboard the first breeze," I can only say that blame must rest with them.

Being an engineer, and much interested in the progress and success of iron as a material for ship-building, as well as its application to other purposes connected with arts and manufactures, I have observed with pleasure the progress of this patent, which I had been led to believe was that of Mr. Smith, but whether he is the original patentee or not, seems a matter of doubt. However, according to the list of ships fitted with wire rope, as given in his advertisement, and the length of time it has been in use, I am of opinion that it is rather an old invention. Having been a resident for some time in Bristol, I have had my attention drawn to the building and rigging of the *Great Britain*, and I perceive that the rigging of that ship and the *Richard Cobden* are the same, and, from inquiry, I find the materials and the rigging worker the same also. Unfortunately, I am a shareholder of the *Great Britain*, as, from what has already recently occurred, I much fear that, when that ship goes to sea, her masts will meet with a fate similar to that of the *Richard Cobden*—however, I trust an explanation on your part will relieve me from the apprehensions I entertain.

I can hardly imagine that, with the accident which has occurred to the *Richard Cobden*, that the directors of the *Great Britain* will risk the wire rope employed, and which is, as I understand, fitted under the direction of Mr. Guppy, the engineer. You will at least do a service to the community if you draw attention to this point; and I think that it should be settled, and only as to what is patentee—with which, however, I have nought to do—but whose rope is to be depended upon. This is a subject requiring the strictest investigation, as regards the application of wire rope, and I should hope Mr. Smith, Mr. Newall, or Messrs. Hetman and Kuper, or any other parties who may be makers of the rope, will at least afford us some information for our guidance, more especially after the remarks made in Cornwall.

A CONSTANT READER.

*Bristol, Oct. 9.*

### THE HYDRAULIC RAILWAY.

SIR,—The self-satisfaction displayed in Mr. Shuttleworth's letter, in your paper of the 12th inst., in rather amusing; and his declaration that his invention is viewed in a favourable light, convinces me he must be a person rather to run away from, than to listen to, unfavourable opinions. I am not singular in considering the hydraulic system one of those chimeras that occur too often in an inventive age, when men, without education in the arts they profess, and without any well grounded knowledge in first principles appertaining to the sciences they tamper with, hoist their vanes, spread their sails, and fearlessly perplex themselves and others with abortive schemes—such are flying-machines, perpetual motion, and hydraulic railways. Has Mr. Shuttleworth yet to learn that he can gain power, but not speed, by his hydraulic system? Has he yet to learn that the non-elasticity of water is against him? and that it is their elasticity which is in favour of both steam and air?

Mr. Shuttleworth speaks as if he could give almost indefinite velocity to a train impelled by his system, although, if he knows any thing of hydraulics, the results obtained at any great water-works might satisfy him of the contrary. Has he yet to learn that—suppose, in case of fire—all the power of their engines would not enable a horse company to supply water, at any moderate distance, to even the height of an ordinary building? There is more to be studied in regard to the properties of water than Mr. Shuttleworth has seemingly dreamt of in his philosophy, else he would not so incessantly and pertinaciously obtrude as fallacies a scheme on public notice—a scheme unsupported and not valued, because at direct variance with well known and established laws. Perhaps Mr. S. will say he is aware of all this—that he is, unfortunately, in advance of the present age—that he has discovered new laws, and is prepared to demonstrate them! The answer, then, to demonstrate them the better. It is the feeling of all who hastily entertain notions at variance with science and custom, that they are persecuted, the world blind, and their notions infallible; thus it is they go on, proving error to the abuse of life—well is, knowing that "a little knowledge is a dangerous thing."

J. B. P.

*Chelsea, Oct. 14.*

### PROPELLING BY STEAM-POWER ON CANALS.

SIR,—My attention has been directed to a paragraph in the *Mining Journal* of the 21st ult., relating to the claims of Mr. H. Davies, of Newton, near Newport, Salop, to the merits of being the first to apply steam-power communicably to the traction of boats on canals, in which it is stated that "Captain Carpenter,' long before Mr. Davies had been heard of,' introduced steam traction on the Grand Junction Canal." As I am in a condition to speak positively to the facts of this case, I trust you will permit me to do so, and thus enable the public to judge as to whom the merit of having practically effected this important application is really due.

In the year 1841, Capt. Carpenter applied to the Birmingham Fire Engine Company (of which company I was then acting as director) to furnish the Company (of which company I was then acting as director) to furnish the Company with a fire engine of 12 horse power, and suitable gearing for driving a pair of his patent stern propellers, to be fixed to the gunwale boat of his Majesty's Dispatch Vessel, of which vessel Captain Carpenter was then commander. Mr. Davies, being at that time the superintendent of the Birmingham Fire Engine Manufactory, prepared drawings of such gearing as to have Fire Engine Manufactory, prepared drawings of such gearing as to have thought suitable for connecting the engine with the propellers, and these were approved of by Captain Carpenter. The whole of the work, except the propellers, was subsequently executed by the Birmingham Fire Engine Company, agreeably with their drawings, and under the superintendence of Mr. Davies. Up to this time, Capt. Carpenter had not applied any steam-engine to drive his propellers on board a boat. This boat being completed, I was present on the occasion of her expeditions, to which we friend, that, on the steam remaining inside of her expeditions, to which we friend, that, on the steam remaining inside of her engine, and depth of water are great, she accomplished a speed of nearly seven miles per hour; also, that she could tow a pair-boat (measuring a large number of tonnage) at a speed of about four miles per hour. I also attended an experiment made with this boat on the Grand Junction Canal, in the presence of the R. H. Shaw, and other gentlemen, connected with the Canal Company, when she towed, with ease, two pair-boats, at the rate of nearly five miles per hour. I also attended another trial in her own locality here, and with other parties interested, a speed of three and three-quarter miles per hour. Thus, then, I consider I am fully entitled to claim for Capt. Carpenter's boat on the Grand Junction Canal, during one half of which the boat was towed, and without loading, and during the other half was loaded and was towed, this is the honour of almost whatever performed by Captain Carpenter on the Grand Junction Canal, and it was deemed so promising of further important results, that the directors of this canal company presented Captain Carpenter with a handsome gratuity, in acknowledgment of his exertions on behalf of canal interests. Consequent upon this experiment, the Birmingham Fire Engine Company fitted up a boat for Messrs. Pickford and Co. with a fire engine and a set of Captain Carpenter's stern propellers, with a view to this being employed in their carrying trade—all the arrangements adopted being approved by Capt. Carpenter. In the mean time, Mr. Davies became more fully convinced, from the above trial of Capt. Carpenter's boat on the Grand Junction Canal, of the correctness of an opinion he had entertained from the first, and which he had repeatedly expressed to myself and others, that the employment of stern propellers on canals (in which the width and depth of water are comparatively small) was wrong in principle, and he, therefore, constructed a boat having screw propellers placed on each side of it near the bows. These two boats—viz., the one belonging to Messrs. Pickford and Co., fitted with Captain Carpenter's propellers, and the one belonging to Mr. Davies, fitted with screw propellers placed according to his views—were each furnished with a fire engine of 8-horse power, and the result of numerous comparative trials with these will be collected from the following letter addressed by R. S. Shay, Esq., the general agent of the Birmingham and Liverpool Junction Canal Company, to the *Midland Counties Herald*:—

"SIR,—In a recent number of your paper, in a paragraph alluding to the introduction of steam-power on the Birmingham and Liverpool Canal, I observe it is stated that I, having been invited to witness the performance of a boat fitted up at the Fire Engine Works on Capt. Carpenter's principle, was so struck with the superiority of the plan, as to recommend its adoption. Now this statement is so calculated to mislead those who, like myself, may be interested to the application of steam-power to canal navigation, that I must beg the favour of your allowing me to correct it. Captain Carpenter's plan is to drive the boat by stern propellers of a peculiar form, and all experience has proved that stern propellers, in any shape, cannot be applied with advantage to the tugging of boats on canals. I feared, and Mr. Davies anticipated from the first, that it would prove what for our purpose it certainly was—a complete failure. So strong was Mr. Davies's impression that this would be the case, that he, without waiting for the result of a trial, commenced building for himself a boat to be propelled on a totally different principle. She was fitted with engines of the same power as the boat on Captain Carpenter's principle, and I tried both boats on the Birmingham and Liverpool Canal on the same day and at the head of the same train. A very short experiment showed on evidently the inefficiency of the one, and the excellence of the other, that we resolved at once to adopt Mr. Davies's principle. Our boats, which were built from his plans and under his inspection, have nothing in common with the one on Capt. Carpenter's plan, except that disc engines are used in both. We consider those engines to have some considerable advantages for the purpose, but, of course, the kind of engine to be employed is a mere question of cost, space occupied, and fuel consumed. I am anxious the public should know the truth; for much time, talent, and money, have been already sacrificed, so many sincere and enterprising men know to their cost, in the attempt to accomplish, by the use of stern paddles or propellers, that in which Mr. Davies has succeeded by very different means; and I should be sorry if Mr. Davies has succeeded by very different means; and I should be sorry if an inaccuracy, which it is in my power to correct, should lead others into similar loss and disappointment.

"ROBERT S. SHAY.

"*Canal Office, Audlem, Oct. 10, 1843.*"

After the trials above referred to by Mr. Shay, the engine was taken out of Messrs. Pickford's boat, and Mr. Davies was engaged by the Birmingham and Liverpool Junction Canal Company to carry out his views of steam propelling; and, during the year 1843, he succeeded in accomplishing a complete system of steam traction on their canal, in effecting which Mr. Davies invented and applied a new apparatus for connecting a number of boats together, so as to form a long train, capable of being steered by one man. So complete a change in this mode of conveyance excited great public attention, and some of the local newspapers having attributed to Mr. R. S. Shay the merit of accomplishing this change, that gentleman immediately addressed a letter to the Editor of the *Chester Courant*, published in that paper of the 19th of September, 1843, in which, referring to such report, he says:—"Now, this merit is not mine, and I am anxious to take the earliest opportunity of disclaiming it. The traps were built, and others are now building, under the superintendence of Mr. Davies, the inventor of the disc engine, who had previously given proof of his fitness for the task, by constructing a boat, against which some of the ordinary objections could be raised. I am happy to give my testimony to his success, which has been so complete, as to induce us to abandon all idea of moving our trains of boats by horse-power."

Amongst other parties whose attention was directed to these performances, Mr. Ellis, agent to the Union Canal Company in Scotland, availed himself of an opportunity to investigate the working of this system, and Mr. Davies furnished him with the model of a boat suitable for their canal, and with details of the connecting and steering apparatus he had invented. Two towing-boats were constructed according to this model, and Mr. Davies furnished the propellers which were applied to them. The performance of these boats was highly satisfactory, and drew forth commendatory notices in the Glasgow *Citizen* and other local newspapers; but, as the merit of the arrangement was attributed incorrectly to some gentlemen of that neighbourhood, Mr. Ellis, attributed incorrectly to some gentlemen of that neighbourhood, addressed a letter to the Editor of the *Glasgow Citizen* (copied into the *Mining Journal* of August 31, 1844), doing justice to Mr. Davies's claims.

Mr. H. Davies has constructed eight towing-boats, fitted with disc engines, for the Birmingham and Liverpool Junction Canal Company, and these are now, and have been for upwards of twelve months, regularly employed in carrying on an extensive traffic on a line of canals extending from Autherley, near Wolverhampton, to Ellesmere Port, on the Mersey, a distance of sixty-nine miles, in which two trains, usually consisting of six or eight loaded boats, are started from each terminus of the above line every day, and, by this means, a quantity of merchandize, averaging between 3000 tons and 3500 tons per week in conveyed by the use of steam-power on canals. The average weight of merchandize conveyed in each train exceeds 100 tons, and the haulage of this for one mile is effected by the consumption of less than a pint of coal; consequently, the power of hauling one ton of goods one mile is purchased by the consumption of *less than half a pound of coal*. The engine is managed by one man; the train of boats is steered by one man; and the only additional attendance is that of a conductor (whose chief duty is to prevent pilferage), except in passing locks, when extra assistance becomes necessary. An equal quantity of goods could not be moved by horse-power, without the continued employment of six horses, with the requisite relays for changing them, and at least twenty-four men to hand the boats.

Independently of Mr. Davies's arrangements for applying steam-power to this purpose being totally different to those of Capt. Carpenter and others, I feel justified in stating that he is the first person who has applied this power to *towing* goods on ordinary canals, to such an extent as can be considered commercially useful; for, although numerous attempts have been made to effect that object, yet, as in the instance of Capt. Carpenter, these have all been abandoned before they have produced any practical result; therefore, I consider that the merit of being the first to apply this power usefully to canal navigation is due to Mr. Davies, and I feel confident that if the proprietors of this property were to avail themselves of the means thus presented to them, they would soon place their interests in a position very different to that to which the use of this power on railways is rapidly reducing it. I am induced to trouble you with this letter, by its position to a talented and deserving individual; for, although my pursuits are now very different to those of the period referred to, I cannot but feel interested in a matter to which I have devoted much time and attention, and am, therefore desirous to contribute the information I possess as to the merits of this case.

W. GEORGE.

*Swansea, Oct. 16.*

### THE RUDE LIGHT COMPANY.

The half yearly general meeting of the proprietors was held at the offices of the company, in Regent-street, on Thursday, the 17th inst., GEORGE WILLIAMS, Esq., in the chair.—By the report of the proceedings presented to the meeting by the directors, and the balance sheet, showing the transactions of the company from its starting in April, 1843, the prospects of the company seem to have greatly improved during the last six months, and there are appearances to justify the proprietors in looking forward to a dividend being declared at their next general meeting, appointed to be held in April next.—Auditors were appointed, the resignations proposed carried, and the meeting was dissolved, after a vote of thanks being passed to the chairman.

[The Rude light, it appears, is being generally introduced into churches, and the Commissioners of Woods and Forests have contracted with the company to put up the Rude lights in Trafalgar-square, which are to be of the most splendid description, and will cost 1 l. each light. The company have also the contract for six splendid chandeliers and Rude lights for the Lloyd's room, in the new Royal Exchange.]

POLYTECHNIC INSTITUTION.—The gallery of the museum of this institution has recently been arranged in a very judicious manner, and great improvements made in the classification of the numerous articles contained in it. Amongst the variety of novelties just now here for public inspection, are a great number of specimens of carvings in oak and other durable woods, produced by the very ingenious machine for which Mr. Samuel Peale, of Somerset-street, holds a patent. This instrument, which is worked by a steam-engine of six-horse power, puts into operation a number of cutting instruments or tools, by which all sorts of carving are produced in an incredibly short space of time—mouldings for gothic window frames, foliations, wreaths of roses, and other flowers, heraldic bearings, &c. It also puts bearings for bearings or journals with an elegance, precision, and rapidity which is most astonishing. The appliances should be seen to all persons interested in an important and most ingenious invention.

CEFN-YN SLATE QUARRY.—This quarry, which is of great extent, situate in Carnarvonshire, North Wales, was sold for 6000 guineas on Tuesday last, by Mr. George Robins, at the Auction Mart. The slate is of excellent quality, of a rich grey blue colour, and can be had in abundance under a very thin cover; the work is already about forty yards wide, and is capable of being extended to 100 yards in width, and at least half a mile in length, without any obstruction, and as deep as any parties may feel inclined to go. It is considered that under a talented direction and a liberal expenditure the profits could not be less than from 100 to 150 per cent. upon the outlay after being put in proper order; the workshop, waggons, and working utensils are in good repair, as also the road, three miles of which has been made at the expense of nearly 2000*l.*, which are included in the purchase.

VALUABLE DISCOVERY.—*(From a Correspondent.)*—A field of ironstone, of the richest quality, has lately been discovered by a gentleman now exploring it, west of Hexham, Northumberland, which promises to yield wealth profusely to Sir Edward Blackett, of Matfen Hall, the proprietor of the extensive royalties; it is said to contain about 15,000 acres, through which the Newcastle and Carlisle Railway passes, with abundance of suitable coal, limestone, fire-clay, &c., above and under the ironstone beds.

WATERGROVE MINE, ETAM.—It is gratifying to hear that, at this celebrated lead mine, there has been recently discovered an immense quantity of lead ore. A small party of workmen last week obtained a quantity in a few hours, valued at 100*l.* There is every prospect of this very rich mine yielding eventually immense profit, notwithstanding the recent enormous outlay.—*Sheffield Iris.*

BUTTERLEY IRON-WORKS.—We learn, by the *Derby and Chesterfield Reporter*, that the long-continued drought has laid Butterley reservoir (which is upwards of fifty acres) nearly dry, and the company have now a number of men employed in pumping out all-or-not the last drop of water for the use of the blast-engine; it is expected that unless rain comes soon, that part of Butterley Iron-works will be obliged to stand. We understand they were driven to the same necessity about eighteen years since.

THE SAFETY LAMP.—A correspondent of the *Times*, under the signature of "Chemicus," writes—"Perhaps at the present time the following remarks may attract the attention of some of your readers who may be more able to appreciate their practical value than myself. I have long considered the Davy lamp, used with the precautions mentioned by the inventor, as theoretically safe, and I know but of one way practically in which those who use it are exposed to danger from its use, which is this:—The air in coal mines is not clear, such as we have in our laboratories, but loaded with dust, which is composed of small particles of coal, and, consequently, inflammable. The gauze of the lamps soon becomes more or less rough, in consequence of oxidation at the temperature to which it is exposed, and to this rough surface the dust adheres, and the surface of the gauze consequently presents, not a good conducting medium by which the temperature of any single part may be kept below that requisite for the passage of flame, but a fuel conducting medium of dust and oxide of iron, or, worse, a surface already in combustion. Your practical readers will tell me how far this might be obviated by making the gauze of iron wire which has been galvanised, and cannot rust, or of gauze which has been superficially coated with silver by the electrotype process, and it is equally secure or more so from rust, while it would allow a much greater light to fall on surrounding objects; I trust these remarks may lead to a trial." —To which "A Practical Man" replies:—"Allow me to acquaint 'Chemicus,' that each Davy lamp is carefully examined by persons appointed for that purpose, before it is allowed to be taken down the pit; and if found in any way soiled, or the wire gauze oxidised, broken, or even thinned, it is rejected, and a fine occasionally imposed on its owner. As a chemist, your correspondent ought to have known that the galvanising process materially impairs the strength of the wires, which would be a fatal disadvantage; and the lamps being cleaned every time they are used, even a thick layer of electro-plating would be removed in less than a week, as gold and silver are remarkably soft metals."

## MINE ACCIDENTS.

*Knot Wheel Crofty.*—As J. Prish was coaching some timber through a level, his foot slipped while passing a wheel, when he fell, and was greatly injured.

*Make Grenoble Quarry, Constantine.*—A man was crushed by a fall of stones.

*Bussey China Clay Works.*—J. Trethewy was killed by a fall of ground.

*Lemel Mine.*—W. Williams was dreadfully burnt by the explosion of a hole.

*Pullfron Colliery.*—J. Thomas was killed by a fall of coal in this colliery, the property of Mr. Price, of the North Abbey Iron-Works.

*Carnbrea Colliery, by Holytown.*—A sad accident happened at this colliery from the foolish practice of leaving the safety lamp over night in the pit. In this case the lamp was left for convenience some five stoop length back from the face (about thirty yards), at a part where the air was good; unfortunately, the workmen proceeded as usual with their naked lamp too far, the gas being out that morning to the outside where the safety lamp was placed, when, as might be expected, the foul air ignited—several props were knocked down by the blast, much damage done to the trafloe, and three men much injured.

*Loanisphorne Colliery.*—An explosion of fire damp took place here, by which one man was injured.

*Coal pit Explosion.*—On Saturday week an explosion of fire damp took place in one of the coal-pits of Messrs. Sparke, near Blackbrook, when two persons were dreadfully burnt, one of whom, a young man named Lovell, only survived nineteen hours, and the other, a young woman, still lies in a precarious state. From the evidence adduced, it appeared that the accident was entirely the result of Lovell's carelessness and stupidity, having been cautioned on the preceding evening, by two experienced workmen, not on any account to work in an opening he had made without having a Davy lamp with him; this prudent advice he disregarded. The jury returned a verdict of "accidental death," and expressed surprise at the fact of a female being allowed to work in the pit, contrary to law. Sergeant Black, of the county constabulary, who attended the inquest, stated, that having heard of the circumstance, he had that morning made inquiry, and had learned that a number of females were similarly employed in the pit of Messrs. Sparke; but that further inquiry would be made, and a thorough investigation follow, if the allegations proved correct.

*Another Colliery Explosion.*—It is our painful duty to record another of these sad events, which occurred at Bentinck Colliery, Kenton, near Newcastle, on Monday last, by which J. Anderson, W. Collins, J. Brown, W. Hebbridge, G. Kent, and J. Richardson, were severely burned, and to whom, though nearly 100 persons were in the mine, fortunately the injury was confined. —[*From a Correspondent.*]—The workmen have waited upon the viewer of the colliery, Mr. Matthew Liddle, and represented the necessity of removing the inexperienced officers before they did any more mischief; he with the greatest urbanity of manner listened to their story, and stated he would remove them, and appoint others sufficiently experienced in the detection of gas before it rises to the firing point. The pit, it is said, will not be safe to begin work again for two or three days. This pit at present is, and has been for some time, unsafe in some particular parts, owing to the presence of gas, yet also was worked within a very short distance of these particular places with candles. The subjoined is a copy of the petition, presented by the workmen to the viewer:—"We, the workmen of Claxheugh Colliery, beg most respectfully to appraise you that, in our opinion, the misfortune of yesterday was occasioned by the want of experience on the part of the deputy, John Brown, who had unadvisedly and wilfully (though warned by the other men) set fire to the gas by taking his naked light to test the danger, and we further are of opinion that you should displace the said John Brown and Thomas Hopper, they being unfitted by want of sufficient knowledge to detect danger, and thus expose the lives of your workmen to great peril and danger. We beg also to call your attention to the fact, that very frequently the lads and other persons come into the workings with candles lighted, where we are working with our Davy lamps, thus showing that a law but *indifferent* is in operation, and we request you to adopt, or cause to be adopted, certain measures to ensure to your workmen the safety of their lives, while following their dangerous occupation."—Signed, the Workmen of Claxheugh Colliery.]—Another correspondent, in concluding a long letter, for which we have not room, says:—"It is melancholy, sad, to observe, with what eagerness every accident we notice here proclaims the subject, is seized, managed on, and dismissed, to wield its discourage the men, from a feeling of respect and distrust, settling down steadily to their employ, and studying their masters' interests, as their own comfort."

The Explosion at Haswell Colliery.—The inquest on the bodies of the unfortunate sufferers was resumed on Friday night, when an unanimous verdict of "accidental death" was recorded, and the jury strictly expressed their decided opinion, that blame could not be attached to any one.

THE HASWELL SUFFERERS.—The general list of subscriptions for the relief of the families of the sufferers by the recent explosion at Haswell Colliery contained on Thursday evening some to the amount of 2200*l.* Among the latest contributions are the Marquis Londonderry, Lord Ravensworth, and the Bishop of Durham, 100*l.* each; the Castle Eden Coal Company, the Duke of Cleveland, Messrs. Backhouse and Co., and others, 50*l.* each; Mr. Liddell, M.P., 50*l.*; and Lord Howick, M.P., 25*l.* Gateshead are to be made on Sunday in several parish churches in the county in aid of the same benevolent object. A public meeting (the first yet held) on the progress of the subscriptions this week was held on Wednesday evening at North Shields, the Rev. G. P. Lefroy, a clergyman of the established church, in the chair. The meeting was very numerously attended, and the subscriptions to the room was considerable. Another public meeting is shortly to be held in Sunderland, under the auspices of the mayor; and no doubt similar assemblies will take place in all the populous towns of the two great mining counties of Durham and Northumberland.

## MINING CORRESPONDENCE.

### ENGLISH MINES.

#### HELSTOUN MINING COMPANY.

*Oct.* 14.—The 110 fathom level west is not yet through the great cross-course; in the 110 fathom level stopes, east of Michell's winze, the lode is 2ft6in inches wide, and worth 16*l.* per fathom; in the stopes west of ditto the lode is twenty inches wide, and worth 35*l.* per fathom; in the stopes west of Goldsworthy's winze, on the north lode, the lode is one foot wide, worth 14*l.* per fathom; west of Lobb's winze the lode is eighteen inches wide, and worth 28*l.* per fathom; in the stopes east and west of Goldsworthy's winze the south lode is one foot wide, worth 18*l.* per fathom. In the 100 fathom level, west of Hitchins's shaft, the lode is two and a half feet wide, worth 40*l.* per fathom; in the stopes in the back of this level, east of Forest's winze, the lode is ten inches wide, and worth 9*l.* per fathom; in the eastern stopes in the back of this level the lode is eighteen inches wide, and worth 14*l.* per fathom; at this level east of Wall's shaft the lode is small and unproductive; in the stopes in the back of this level, west of Hitchins's shaft, the lode is one foot wide, and worth 16*l.* per fathom. In the ninety fathom level, west of Hitchins's shaft, the lode is eighteen inches wide, and worth 25*l.* per fm.; in the stopes in the back of this level the lode is fourteen inches wide, worth 18*l.* per fathom; in the stopes west of Pearce's winze the lode is eighteen inches wide, and worth 25*l.* per fathom. In the rise in the back of the eighty fathom level, east of the south cross-cut, the lode is eight inches wide, at present unproductive. In the sixty two fathom level driving south, west of the great cross-course, the ground continues favourable. In the 100 fathom level, driving east of the south cross-cut, the lode is two feet wide, and worth 30*l.* per fathom. The pitches on the whole continue to turn out well.

T. Richards.

#### GREAT WHEAL MARTHA CONSOLIDATED MINES.

*Oct.* 12.—The men are getting on with all possible speed in cutting the plat at the seventy, and will finish the same in a few days. The lode in the sixty fathom level west is still five feet wide, composed of capel and mundic and good stones of copper ore, rather improved since last reported. The cross-cut east of the engine-shaft at the forty is driven about thirteen fathoms, ground rather harder; on the cross-course west in this level we have driven three and a half fathoms, in favourable ground.—At the new mine, the lode in the ten fathom level going east is three and a half feet wide, composed of mundic, capel, and copper. For want of a full supply of water, our progress is but slow with sinking Thomas's shaft. The deep adit is now driven twenty-four and a half fathoms.

T. Penaluna.

#### COOK'S KITCHEN MINE.

*Oct.* 13.—In the eastern shaft, sinking under the sixty fathom level, on North Tincroft lode, we are still sinking on the floorkan part. We have not been sinking in the flat-rod shaft since our last, having been making an alteration in the pitwork. The pitches on this lode are looking much the same as for some time past. The lode in the new east shaft, sinking under the eighty-two fathom level on Rodey's lode, is four feet wide, worth 6*l.* per fm.; in the winze below this level the lode is worth about 10*l.* per fathom. Chapple's lode in the 170 fathom level east is much improved since our last; it is six feet wide, worth 18*l.* per fathom for tin. Dunkin's lode in the 160 fathom level west is four feet wide, worth 3*l.* per fathom. The winze sinking below the 140 fathom level is still progressing in favourable ground. The lode in the shaft sinking on the *cassiter* is three and a half feet wide, producing good work for tin, and has a very promising appearance. In sinking the new shaft to intersect Druid lode the ground is very favourable. There is no alteration in any of our cross-cuts since our last. Our tribute department is looking much the same as for some time past.

A. Eudey.

#### BEDFORD UNITED MINING COMPANY.

*Oct.* 15.—At Wheal Marquis, the engine shaft is sunk five fathoms below the fifty-eight fathom level. In the fifty-eight fathom level east the lode is twenty inches wide, and worth 12*l.* per fathom; in this level west no lode has been taken down since last report. The lode in the winze sinking in the bottom of the forty-seven fathom level east is two and a half feet wide, composed of quoman, spar, and ore; in the forty-seven fathom level west the lode is two feet wide, and worth 20*l.* per fm. The lode in the thirty-five fathom level west is twenty inches wide, and worth 15*l.* per fathom; in the winze sinking below this level the lode is twenty inches wide, and worth 10*l.* per fathom. The pitches continue to turn out well. In the deep adit level the lode is two feet wide, and worth 8*l.* per fathom.—At Drag Doug, the lode in the twelve fathom level east is two feet wide, composed of spar and mundic, with good stones of ore in places.

J. Phillips.

#### CONSOLIDATED TRETOIL MINING COMPANY.

*Oct.* 14.—The lode in Heawood's shaft, sinking under the sixty fathom level, is sixteen inches wide, worth 12*l.* per fathom; price for sinking, 10*l.* per fathom; the lode in the sixty fathom level, east of Heawood's shaft, is eighteen inches wide, worth 40*s.* per fathom; price for driving, 30*s.* per fathom; tribute when set, 10*s.* in the 1*l.*; in the sixty fathom level, west of Heawood's shaft, no lode has been taken down in the past week; price for driving, 2*l.* per fathom. The lode in the fifty fathom level, west of Williams's shaft, is 6ft6in inches wide, producing a little ore; price for driving, 6*l.* per fathom; the lode in the fifty fathom level, east of Heawood's shaft, is nine inches wide, producing some good ore; price for driving, 4*l.* per fathom. The lode in the forty fathom level, east of Heawood's shaft, is fourteen inches wide, worth 6*l.* per fathom; price for driving, 45*s.* per fathom; tribute when set, 6*s.* 8*d.* in the 1*l.* We have sampled this day ninety tons of ore.

H. Williams. J. Murdoch.

#### TAMAR SILVER-LEAD MINING COMPANY.

Oct. 14.—In the 115 fathom level the lode is eighteen inches wide, producing work of a fair quality. In the 105 fathom level the lode is two feet wide, string work, though coarse. In the ninety-five fathom level, the lode is twenty inches wide, rich work. In the eighty-five fathom level the lode is small and poor. The seventy-five fathom level is still in sixty ground, and unproductive. In the sixty-five fathom level the lode is one foot wide, 6*l* inches of which is work of a promising character. In the fifty-five fathom level the lode is two feet wide, producing some good work. In the fifty-five fathom level the lode is three and a half feet wide, carrying two small branches of ore. In the thirty-five fathom level the lode is eighteen inches wide, one foot of which is very good work. I am happy to state that our shallow levels are much improved. The incline plane shaft is sunk ten fathoms below the fifty-five fathom level, on the incline, and still in a favourable way of sinking. North Tamar, the lode in the engine-shaft is twenty inches wide, composed of capel, with a small quantity of ore. At the fifty fathom level, north of the shaft, the lode is six inches wide, unproductive. In the forty fathom level north the lode is twenty inches wide, carrying a small branch of ore, of a very promising appearance. In the thirty fathom level north the lode is nine inches wide, at present poor. At Wheal Ruscoch the engine-shaft is sunk 1 fm. 4 ft. below the twenty-seven fathom level; the cross-cut towards the lode is driven four fathoms. We sold on Saturday last 114 cans of silver-lead ore, at 26*l.* 5*s.* 6*d.* per ton.

James Sprague.

#### WEST WHEAL JEWEL MINING ASSOCIATION.

Oct. 16.—The 100 fathom level east, on Wheal Jewel lode, is improved in its appearance since our last—now two feet wide, composed of spar, prian, and black and yellow ore; the ground is also very favourable for driving. The eighty-six fathom level east, on the new lode, is also improved in the past week, 18 inches wide, containing good yellow ore, and also letting out much water. No lode taken down in any other part of the mine since our last.

S. Lean. R. Jenkin.

#### VIVIAN-POST MINING COMPANY.

Oct. 14.—I beg to hand you my report of these mines from my this day's inspection. The lode in the eighty east cost is three feet wide, producing coarse quality ores; the lode in the west end, same level, is at present in a disordered state; we expect soon to meet with a cross-course, beyond which, in the seventy, we have driven twenty fathoms through a good lode, worth 20*l.* per fathom on an average; the end of present is worth 30*l.* per fathom, leaving good back and bottom; a rise in back of the same level is worth 50*l.* per fathom. The lode in the seventy east is twenty inches wide, producing coarse good quality ores, worth 8*l.* per fathom, and likely to be better soon; a winze sinking below this level, about eleven fathoms east of the shaft (now down six fathoms), is worth 12*l.* per fathom. The lode in the sixty east is three feet wide, yielding some tin and copper ores, very promising for the latter; the sixty west is worth 6*l.* per fathom. The fifty east and west is producing some ores, and kindly, as is also the forty west. Our pitches, on the whole, have improved since my last report. At Polmear's we are raising good quality ores from the back and bottom of the sixty-five west; the end at that level is now worth 6*l.* per fathom; the winze, sinking under the sixty-five, is beginning to ore, with a regular underlay south. Our pitches in the south mine continue to yield ore quality the same. I am glad to say our prospects throughout are brightening.

W. Pascoe.

#### RANDOR MINING COMPANY.

Oct. 14.—Since my last report we have cut the lode at the forty-four fathom level; we find it split into two branches with a horse of killas in the middle; the north branch is six inches; the south branch four inches wide; these branches will soon get together by driving east and west, where we expect a favourable change, as was the case with the level above. The lode in the fifty-one fathom level east is fourteen inches wide, producing some ore, and kindly; the lode in the west end, same level, is two feet wide, composed chiefly of mundic, with some ore, very kindly. The Gordon shaft is sunk four fathoms below the twenty-one fathom level; the lode is twenty inches wide, with some ore, and is dispended for the present, in consequence of stuck engine, which will be drawn forth, when the thirty can secure order to. The winze, sinking under the twenty-one fathom level, is down about three fathoms; the lode is twenty inches wide, a very kindly lode, and worth ore.

J. Williams.

#### CALLINGTON MINING COMPANY.

*Oct.* 14.—Having made the necessary preparations for, we have now commenced, sinking the north engine-shaft to a ninety fathom level. At the eighty fathom level we have not been driving in the past week, having put the men to rise, in order to communicate with the seventy for the improvement of ventilation; the lode in this part, as well as at the seventy, continues to yield work of good quality; the leaders will pay at about 6*s.* in the 1*l.* on the value of the lead; the backs of the other levels will work at 10*s.* in the 1*l.* At the south mine, in the ninety fathom level driving south, we have still got Johnson's lode in the bottom of the end; the underlay being rather flat, it is about two feet big, producing good stones of ore; in the north end the silver-lead lode is ten inches big, worth about 8*l.* per fathom. In the eighty it is worth 8*l.* per fathom; in the winze sinking below this level, which we expect to hole this month, the lode is much the same as in the ninety end. In the seventy the lode has not been taken down. In the sixty, and winze sinking below this level, we are opening tribute ground.

J. T. Phillips.

#### CORNUBIAN MINING COMPANY.

*Oct.* 14.—Murray's engine-shaft continues much the same for sinking as for some time past. The seventy-eight fathom level, driving east, is producing some lead, worth about half a ton per fathom; the western end is, at this time, unproductive; the cross-cut, going north at this level, is in more favourable ground than we have usually had; there is also an improvement in the pitch working in the back of this level. The eighteen fathom level, at Ventonglimps, has been passing through ground during the past week worth about 2*l.* per fathom. The lode in the ten fathom level west is worth 8*l.* per fathom. The adit level is without alteration. On Friday next we shall sample about forty-five tons of silver-lead ores.

J. Webb.

#### UNITED HILLS MINING COMPANY.

*Oct.* 13.—In the eighty fathom level, east of Williams's shaft, the lode is five feet wide, two and a half feet on the north part ore of fair quality, worth 26*l.* per fathom. In the seventy fathom level, east of Williams's shaft, the lode is four feet wide, two and a half feet good ore, worth 36*l.* per fathom; in the seventy fathom level, west of ditto, the lode is five feet wide, very throughout, coarse in quality, worth 10*l.* per fathom; in the stopes in back of seventy fathom level the lode is two and a half feet wide, eighteen inches ore of good quality, worth 15*l.* per fathom. In the sixty fathom level, east of eastern shaft, the lode is two and a half feet wide, one foot on the north part producing ore, worth 6*l.* per fathom; in the sixty fathom level, west of James's shaft, the lode is four feet wide, two feet ore of average quality, worth 12*l.* per fathom; in the cross-cut north of James's shaft we expect to cut the north part of the lode in driving two fathoms. In the thirty fathom level, east of eastern shaft, the lode is one foot wide, producing some stones of ore, with a promising appearance. In the ten fathom level, east of ditto, the lode is eighteen inches wide, producing but a small quantity of ore. At Wheal Sparrow, in the fifty fathom level, south of Gibson's, no alteration since last reported. In the forty fathom level, east of Gibson's, the lode is fifteen inches wide, six inches ore of good quality, worth 6*l.* per fathom; in the forty fathom level, west of ditto, the lode is two and a half feet wide, producing some good stones of ore, worth 8*l.* per fathom. In the thirty fathom level, east of Richards's, no lode explored as yet. In the twenty fathom level, south of Turner's, we expect to cut Stacey's lode in driving from nine feet to two fathoms. In the ten fathom level west, on Stacey's lode, the lode is eighteen inches wide, one foot ore of fair quality, worth 12*l.* per fathom; in the ten fathom level, south of Turner's, we are daily expecting to cut Stacey's lode in this level.

N. Langdon. T. Trevenen.

#### TRELEIGH CONSOLS MINING COMPANY.

*Oct.* 14.—In Christoe sump winze, below the eighty east, the lode is two and a half feet wide, worth 28*l.* per fathom—still improving as we sink. In the sixty, west of Gardoe's, the lode is four feet wide, with a promising appearance, and stones of ore. At Good Fortune, in the seventy east and west lode, the west end is looking more kindly, with stones of ore—the east end is two feet wide, split in branches, without mineral. In the sixty, west of ditto, the lode is two feet wide, yielding stones of ore; in the sixty, east of ditto, the lode is two and a half feet wide, worth 16*l.* per fathom. In the first winze below the fifty west the lode is two feet wide, worth 12*l.* per fathom; the second winze below the fifty is holed to the sixty fathom level. In the fifty, west of Symons's, the lode is two and a half feet wide, worth, at last week, 12*l.* per fathom. In the forty-four, west of ditto, the lode is eighteen inches wide, worth from 2*l.* to 4*l.* per fathom. In the thirty-four, west of ditto, the lode is twenty inches wide, but little mineral. In the twenty, west of ditto, the lode is five feet wide, worth 6*l.* per fathom—the ore on the south part of the lode, with a most promising appearance. In the adit, west of ditto, the lode is from eight to ten inches wide, still disordered.

W. Symons.

## FOREIGN MINES.

#### IMPERIAL BRAZILIAN MINING ASSOCIATION.

*Gongo Soco, July* 12.—Since our reports of the 2*d* inst., the result of our operations has not been quite so favourable in point of produce, owing partly to the stuff not having been sorted over, and partly to the small quantity pulverised; the latter arises from a deficiency of surface water. The new party of miners, consisting of eleven men and six boys, who arrived here the day before yesterday, together with the three miners engaged this morning, are for the present stationed about on the old Gongo Mine; but I would now recommend six men being sent to Cata Preta, for the reasons I have already mentioned to you verbally, and shall state to the board in my report. I advise the resumption of the deep adit there with the just named men, and, should it be found difficult, I consider it will be advisable to turn it in a northerly direction, so as to reach the fort well as quickly as possible; very hard ground is preferable to exceedingly soft for an adit, and I should not approve, therefore, of keeping it out on the south ground, if it is soft, heavy, wet, and troublesome; it would be an endless trouble and expense—whereas, on the other hand, once excavated, it would be for ever finished. The portion of my report regarding Gongo, I hope to be able to put into your hands in the course of four or five days for perusal; I am anxious to be doing something which may lead to better results than the operations now in progress are likely to lead to. From the new north vein, north of John's shaft, we have had a few hat-cups of work for the washing house—and I am happy to inform you, that we yesterday found the continuation of this shoot in the rise west of Hostetter's shaft, and obtained from it a hat-cup of middling work; stopes are being opened upon it. We have discontinued the cross cut at the thirty-four fathom level, south of Avellano, having driven it sufficiently for the object we had in view. We have ascertained that the old workings at the shallow level towards Canta Gallo were made by Brazilians, and that they are in a vein; we have reached their bottom, which is about four feet under the bottom of our level, and have taken some fair samples; we shall, however, proceed on a little further, as we are anxious to intersect the small shoot, which afforded some good samples near Baird's shaft. Should the present month's stamping not prove more favourable at Tabelleiro, I shall recommend all proceedings at this place to be discontinued.

*July* 23.—Since I last addressed you, on the 12th instant, no alteration of moment has been presented at any place. We continue to supply the stamps from the old backs, but some of them have afforded very work for the washing-house; the produce from these is now being cleaned, but I believe the results will exhibit no material difference between it and that of the ten days preceding. We have had no rain, consequently the surface water continues little. The new north vein, north of John's shaft, has not been so productive of hat-cups of work for the washing-house during the last ten days; and in the rise west of Hostetter's, although we have more gold occasionally, still it has not been in sufficient quantities to require boxes or hat-cups—but a small connection yields profitable work for the stamps, and by excavating upon the line of the lily we may find an improvement. We have commenced clearing and turning the true level between Bain's and Pengelly's shafts, for the purpose of opening a road for the transmission of stuff to the Great Western stamps, from the stopes we purpose opening at this section of the mine. In the shallow level towards Canta Gallo we have passed two more old workings made by Brazilians; we are clearing them out, and, if we find their bottoms such as to recommend it, we shall resume the twenty-one fathom level from Cascia.—I have visited Cata Preta since my last reports, which circumstance prevented me from furnishing you with my reports for the directors, as I had hoped; it will, however, be ready now in all respects by the 30th, when I shall hand it over to you for transmission to England. The result of my examination at Cata Preta, coupled with the trial of the stopes, compels me, I regret to say, to advise the abandonment of the quarts lode. I commenced a trial of the Formentos Preta, at Cata Grande; here is shown to our present operations. Ten men were this morning selected for Cata Preta.

T. Freeman.

*Gold Account.*

| 1845. | From the stamps. | Value ounces. |
|---|---|---|
| July 26 to Aug. 2 | Participants and miners | 5 0 7 15 0 |
| Aug. 2 | Ditto | 0 0 0 0 |
| | | 5 0 7 15 0 |
| Increase in weight | | 0 0 7 0 |
| | | 5 0 0 15 0 |
| Eighteen days | | 5 0 0 0 0 |
| Value from 1st July to 17th August | | 5 0 0 1 0 |

#### BRAZILIAN COMPANY.

*Cata Preta, Aug.* 6.—In order to try the value of the lode at the bottoms, I have desired that the stone from thence be kept separate, and as soon as the stoppers are ready, this shall be case-hulled. At Sandstone the operations are almost entirely suspended from the want of water; this is a great annoyance, but is most, I fear, the former until the rainy set in again, and it is to be hoped this will be earlier than usual, the draught having now continued for nearly eighteen months, the last rainy season having been so early in coming. Having a few spare hands, we are sinking somewhat in the junctings from the lode behind Cata Branca, taking the direction of the run of the lode, with the intention of cross-cutting from each, to ascertain if the lode holds into the junctings, and if there are any auriferous lines worth attention.

*Aug.* 17.—The inclosed gold return shows some improvement, and I am not without hope that there is a change for the better in the stone from the bottoms; the present week will show if such is the case, as the stamps will be kept with that only. The junctings formation behind Cata Branca is so far promising, that it contains gold, but nothing like lode has yet been met with. We still continue without rain, and, consequently, idle at Sandstone.

E. Harding.

Gold for six weeks to August 16—30 lbs. 4 oz. 1 dwt. 4 grs.

#### ST. JOHN DEL REY MINING COMPANY.

*Morro Velho, July* 18.—The contents of gold per cubic foot is very low, and is, I believe, chiefly attributable to the poorness of the ore broken in the west end of East Cachoeira, which is a very poor piece of lode; Capt. Varvas says there will not be much more of this ore broken for the present. The Herring stamps are now only working nine heads, instead of twelve, from scarcity of water. The scarcity of water this year is general, even the Cubitas Brook fails it; last year, on the completion of the lent, we turned in 1400 cubic feet, and still one-third was running to waste.—In the mine, the West Cachoeira is still being cleared of its silts, consisting principally of great rocks. Monash's shaft has been timbered down, which will prevent any more accidents from kibbles hitching; the same will now be done to Rouse's shaft. There is nothing else new in the mine.—The mechanics are working with full force on the new smiths' shop. The wheel pit for the tilt-hammer wheel is completed, and all the framework for this machine firmly fixed. John Rouse hopes to be able to move the smiths into the new shop by the end of the next month. The new system lent is nearly completed, so we shall be ready for the iron pipes long before they arrive. The various works are going on satisfactorily.

#### REAL DEL MONTE MINING COMPANY.

*Mineral del Monte, August* 20.—I beg to acknowledge the receipt of your despatches of 1st June and 1st July, accompanying the report made to the general court of proprietors held on the 25th June, by which I am glad to observe that the directors have expressed themselves satisfied with the exertions I have made for the purpose of endeavouring to keep down the expenditure; we cannot, however, but regret the serious falling off in the returns in the latter part of 1843 and the beginning of the present year. The quantity of ore raised of late has upon the whole been very fair, although of the class of smelting the proportion has been unusually small; the produce of June was 1028 quintals of smelting, and 15,582 cargoes; for July, the former amounted to 810, and the latter to 13,619; for the present month the produce will be about in the same proportion. It will be observed, by the hacienda reports, that the results of the beneficio during the last month or two have been somewhat more favourable than formerly, although the expenses are still exorbitant, owing principally to the large quantity of material used in the reduction of the Colorado ores from Sacramento and La Luz. The loss of silver from the patio at Regla amounted last month to 20 per cent.; but a large proportion of this is afterwards recovered by re-washing the pulvillon, as may be seen in referring to the monthly reports. It is satisfactory to notice, that the results from the barrel process at Sanchez continues to be favourable, although the cost of reduction last month was high, which may partly be accounted for owing to the extra work in putting up the four additional barrels, which were only completed about the middle of the month. During the present month the eight barrels have been constantly at work, and the results, it may be expected, will be much more favourable. The only farms at present in hand in this establishment is that of completing a large shed for the fuel, and also laying down a new floor around the new barrels and dry stamps. Now that we have suspended the beneficio per patio in this hacienda, we propose to take up the old floor, for the purpose of getting out the quicksilver and amalgam, of which it is supposed there is a large quantity, judging from a small part which we have already examined; after this shall have been done, we propose to lay down a small part of new floor, sufficient for one torta of 300 cargos, which we expect to beneficiate monthly, in addition to the barrels. At present there are at this establishment six calcining furnaces, which, when in full work, barely supply sufficient ore for the eight barrels, and it has occasionally become necessary to clear the floor; the process of calcination is consequently suspended, thereby causing a diminution in the returns—to remedy which, we propose erecting an additional furnace. The cost of two connected to the barrels will in future be added to the cost of reduction. Enclosed you will receive a drawing of the new barrel establishment at San Antonio, with a list of the machinery required from England, which, I hope, will be got ready and despatched with as little delay as convenient. I do not send the minute estimate of the cost of the particular pieces required, nor of the necessary buildings to be erected, but the whole when finished may be calculated to amount to $60,000; but, as in the first instance we propose to proceed with the erection of only one half of the proposed number of barrels, we may expect to receive returns long before this amount is expended. I purpose commencing after the rainy season has passed over—say, in the month of October—to cut down timber for the water-wheels, &c., and to clear the space for the barrels, furnaces, dry stamps, &c.

The workings east of San Benancio winze, above and below San Juan level, continue to yield a good produce of ore of both classes; and, as there is still a large piece of whole ground further east, there is reason to expect a continuance for some months to come.

*Terrores.*—In my letter of 20th May last I remarked, that unless a decided improvement took place in the driving Taylor's level east, and to the San Alphonso bottoms below Socorro, it was the unanimous opinion of all the underground captains, as well as my own, that the idea of sinking Terrores shaft for another level below Taylor's could not be entertained; no such improvement has taken place, and, with the present number of barreteros (fifty-eight) employed in these workings, the ore will probably be exhausted some time in the early part of next year, when it is proposed to suspend the working of Terrores engine, and confine ourselves to the ground above the avisadero of 137 vara level, to which depth the water will still be drained by Dolores engine; on carrying out this plan, a considerable saving of expenses will be effected, without seriously interfering with the returns or general results. You will perceive from the mine manager's report that the water will probably be drained from the 172 vara level at San Cayetano in about another month, when we shall be enabled to proceed to examine the rich string of ore gone down to that level.—The Dolores diagonal shaft wants about four varas to reach the depth of the proposed new level, which will probably be completed by the end of next month, after which we shall proceed to examine the south part of the vein—and which will, in all probability, effect a complete drainage of the mines below the Santiago level; the water in this place has already somewhat abated, and the sinking of the winze was consequently resumed last week; the lode is large and rony, and has a very promising appearance. In the avisadero adit, driving north of Dolores, we have again cut into a part of the main lode on the western side of the Santiago branch, and I am happy to inform you that the appearances are very favourable; a part of the vein, about three feet wide, is composed of ore, the assays from which came out as follows:—

| | | | |
|---|---|---|---|
| Antigua, first class | 20 | 0 | oz. per cwt. |
| Colorados, rough | 10 | 1 | — |
| Colorados, small | 18 | 0 | — |
| Rojizado | 9 | 4 | — |
| Antigua, second class | 7 | 14 | — |

This discovery was made on the night of the 8th instant, so that we have not had sufficient time to examine it.

*Acosta.*—Although still a very good mine, this is, in my opinion, giving indications of improvement. The avisadero adit, driving west of San Pedro shaft, has throughout the whole distance (about twenty varas) continued more or less auriferous, and in the present end there is a branch of ore, small, but formed, containing per assay 14 mrks. per montón—and this work is exploring new ground, which in the levels above was almost entirely without ore. During the present month we dead a new plunger lift in San Pedro shaft, at the level of the avisadero adit, and the sinking was again resumed in the beginning of last month; in the course of next month we expect to cut the vein in the shaft, and, judging from indications observed in the avisadero level, we may expect to find the vein to ore.

*La Luz.*—Although the quantity of smelting ore hit off occasionally here last month, it is still by far our best mine, having produced in the last four weeks 1103 cargos of sarqueo, and 60 cs. of smelting ore—and the eighty-one vara level driving south is still, I am happy to state, in a good vein, about one vara and three quarters wide, about one fourth part of which is sarqueo ore, containing from 12 dgs. to 20 ozs. per montón; this level has now passed through the ground for about seventy feet in length, but we are prevented from sinking below it near the end at present, on account of a stratum of water lately met with in coming through an east and west vein; this, however, I hope, will soon disappear, as it is probable the avisadero adit east will drain it as soon as it reaches any of the branches of the Santa Brigida vein; into this end (the avisadero east), you will notice, by the subjoined list, there are twelve men employed—four men in a stope, working eight tenor course, in order to push the work as fast as possible.

The heavy loss of the steam engine at San Pedro shaft at Acosta, last far some time past occupied our machine attention; it will be seen that it is now nearly landed to bottom, per square inch on the piston, and when the shaft is down for the next month will be raised 20 lbs. per square inch; beyond this it will be dangerous to go until further—and, as the water does have lately accumulating in the bottom of the shaft, it is probable we shall at no distant period require larger pumps, and, in order to do this, there must be a larger engine. I outlined in the former part of this letter that I proposed engine could probably be suspended standing in the early part of next year; it has, therefore, occurred to me that it would be a prudent measure to commence it to Acosta.

At Terrores, there seems very little prospect of making any important discovery in the deep workings; and, taking the great extent of the trees that

in the Esperanza, San Miguel, La Cruz, and San Felipe levels, westward, there is an encouragement to drive in that direction at the bottom levels. At Acosta, on the contrary, we may expect to make good returns for a long time to come. On the Santa Brigida there is a fine productive vein going down in the bottom of the eighty-one vara level for nearly the whole length driven, and surely we may reasonably expect to find bunches of ore on the Acosta vein at a greater depth; and when this attraction is completed, we shall be enabled to reduce the expenditure very considerably—for, besides doing away with one engine, and all the expensive works connected therewith, we shall also dispense with a part of the establishment of artificers of different descriptions, which at present we are under the necessity of employing.

At the new mine of Rosario, in the Pachuca district, we have during the present month been engaged in building the wall to receive the shaft tackle, putting in bed casing in the shaft, and cutting down a side of the hill for a white-stone; all these works have been rather expensive, but they are now drawing to a close, and will be completely finished in about eight or ten days more. The encouraged works continue to present their most favourable appearances, and when the entrance is finished I expect the raisings will be immediately increased to upwards of 100 to 150 cargas per week. I sent to Regla bastonada, in the latter part of last week, a batch of 231 cargas, which will be benefitted, and the silver realized in the accounts of this quarter; there will still, however, be a balance of between $7000 and $8000 against the concern, which we hope to repay by the end of the year.

It will be seen, by the accounts for July, there was a loss on the transactions of the month of about $7000. The falling off in the returns was principally owing to a decrease in the produce of smelting ore towards the end of the month.—The silver returns for the five weeks of this month will be about fifty-four bars, which, I expect, will fully cover the expenditure.—Enclosed you will receive bills on her Majesty's Treasury for £6000, and on the Parkeon Mining Company for £600.—Together, £6600; and I purpose forwarding by the Government conducta, which leaves Mexico on the 1st of next month, the sum of $30,000, which shall be shipped by first opportunity—probably by next packet.

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THE IRON TRADE.—Since our notice of last week, the Dudley meeting of the ironmasters has been held, and at which, we regret to say, it was determined that the price could not be maintained. Various reasons were assigned—the most probable, perhaps, being, the over speculation of small makers: it would seem many of these, unable to keep stock, have, by underselling the large houses, rendered a sweeping reduction necessary on the part of those extensive proprietors who have been endeavouring, for their own sakes, and the general interest of trade, to obtain something like a remunerating profit. The competition arising from the furnaces of other districts has also materially operated against Dudley, and, no doubt, hastened the issuing of the circulars, announcing the following reductions:—Nos. 1 and 2 pig, £1 per ton; Nos. 3 and 4 ditto, £1 10s.; forge, £2; and bars, £3. The Lilleshall Company, however, have not actually made such reductions, and certainly not expected at a time when the railway speculations were holding out the prospect of an enormous demand for at least another year or two.

IMPROVEMENTS IN METALLIC PISTONS.—Mr. E. Wharton, engineer, of Birmingham, has obtained a patent for an improved method of constructing metallic pistons: it consists of a bore to receive the piston rod, cast on a disc of metal, which is somewhat smaller than the cylinder; on the outer circumference are placed four loose segments, with a wedge-formed piece between each, which they form a circle, which is capable of expanding or contracting: these segments are of a conical form on the inner circumference, to which a cast-iron ring, cut at one portion to give it elasticity, is fitted, and on this ring continue pressure from above, forces the segments in a direction outwards from the centre of the piston, forming a perfect steam-tight joint, the whole being properly regulated by adjusting screws. He has also obtained another improvement in fine engines, by which keepers packing will be nearly superseded, although he prefers a little; the plan mentioned is a peculiar method of applying metallic packing in conjunction with hemp.

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### PUBLIC COMPANIES.

MEETINGS.

TUESDAY.—Agricultural and Commercial Bank of Ireland, 12 Twelve.
WEDNESDAY.—Shrewsbury Railway Company, 12 Twelve.
THURSDAY.—Ceylon Banking Company, at One.—Globe Insurance Co. at One.

CALLS.

London and Guildford Junction Railway, £1.

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### CURRENT PRICES OF STOCKS AND SHARES.

STOCK EXCHANGE, Saturday morning, Twelve o'clock.

Quarter Shares, 1852
Quarter Annuities, 1852
Ditto to pay Quarter, 1852
Exchequer 1 per Cents., 1854
Long Annuities, 12 1-16
Bank Stock, 215
Reduced Ditto, 75 75 per.
Regular Bonds, 1 per Cts., 1862
Bonds, 1 per Cent., 60 61

Bonds, 2½ per Cent., 1859
Ditto, 1 per Cent., 1859
Portuguese, Class 4, 4 per Cent., 55
Russian, 5 per Cent., 1771 106
Spanish, Active, 5 per Cent., 1821
Ditto, 5 per Cent., 1841
Chili, 6 per Cent., 101
Colombian, 6 per Cent., 1861
Mexican, 6 per Cent., 1851

BANK OF ENGLAND.—An account, pursuant to the Act 7 and 8 Vic., cap. 32, for the week ending on Saturday, Oct. 16, 1852:—

ISSUE DEPARTMENT.

Notes issued ..... £27,000,000
Government debt ..... £11,015,100
Other securities ..... 4,984,900
Gold coin and bullion ..... 11,000,000
Silver bullion ..... 1,000,000 £27,000,000

BANKING DEPARTMENT.

Proprietors' capital ..... £14,553,000
Rest ..... 3,009,800
Public deposits (including Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts) ..... 5,141,599
Other deposits ..... 9,999,571
Seven days and other bills ..... 1,107,200
..... £27,809,570
Government securities (including dead weight annuity) ..... £12,686,800
Other securities ..... 14,613,770
Notes ..... 2,211,000
Gold and silver coin ..... 297,970 £27,809,570

Banker for [illegible] H. DARRELL, Chief Cashier.

The proportion of gold to Notes is 7 per cents. which, at the English Mint prices of £3 17s. 10½d. per ounce for standard gold, gives an exchange of 25 p.c. and the exchange at Paris on London, at Short sight is 25½, a fraction less gold is of course sent to Paris.

The exchange on Hamburgh has gone at prices, 4½ per month, which, at the English Mint price of £3 17s. 10½d. per ounce for standard gold, gives an exchange of 13 p.c. and the exchange at Hamburgh on London, at short sight is 13.42, a fraction less gold is 1 p.c. per cent. drawn to Hamburgh than to London.

The course of exchange at New York on London is 110 per cent., and the par of exchange between England and America being 109 9-10 p.c. per cent., it follows that the exchange is 1-10 per cent. in favour of England, but the actual exchange at New York being the rate at which most sight, the interest would be added to the above difference.

[From our own correspondents.]

LATEST PRICES OF SHARE STOCKS.—Last Quarter Dividends (Oct.) to [illegible]—Australasian, [illegible] per Cent.; Australian Agricultural, [illegible] per Cent.; Bank of Australasia, [illegible] per Cent.; Bank of Australia, [illegible] per Cent.; Bank of Australia, [illegible] per Cent.; Bank of Austral